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Final report

# PMT/vPvM assessment of REACH registered Substances Detected in Wastewater Treatment Plant Effluent, Freshwater Resources and Drinking Water

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On behalf of the German Environment Agency

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**Abstract: PMT/vPvM assessment of REACH registered Substances Detected in Wastewater Treatment Plant Effluent, Freshwater Resources and Drinking Water**

A literature review was conducted to compile a list of substances that have been detected in wastewater treatment plant effluent (WTPE, 442 substances), surface water (SW, 1021 substances), bank filtrate (BF, 114 substances), groundwater (GW, 338 substances), raw water (RW, 212 substances) and drinking water (DW, 385 substances). There were 639 substances detected in at least one of the four drinking water relevant media (BF, GW, RW and DW), of which 311 (49 %) were REACH registered substances (as of September 2019). In total, there were 1289 substances detected in at least one of all six water media considered (WTPE, SW, BF, GW, RW and DW), of which 509 (39 %) were REACH registered substances. A PMT/vPvM assessment was performed for each of these 509 substances. The PMT/vPvM criteria was met by 22 % (110 of 509) of all detected substances and even by 30 % (92 of 311) of the detected substances in drinking water relevant media. Another 5 % (23 of 509) substances met the criteria for persistency and mobility but with no high-quality consensus conclusions that the criteria for toxicity was met. For 27 % (136 out of 509) of detected REACH registered substances, conclusions on whether the PMT/vPvM criteria were met were ambiguous; whereas, there was insufficient data to conduct a PMT/vPvM assessment for 20 % (103 of 509) of detected REACH substances. Only 26 % of the detected REACH registered substance (137 of 509) were concluded as not PMT/vPvM substances.

Three important conclusions can be taken from this literature review. The first is that REACH registered substances are commonly detected in drinking water relative media (49 % of all substances identified), and often above 0.1 µg/L (58 % of REACH registered substances). The second is that, despite data gaps to perform a definitive PMT/vPvM assessment on all substances, REACH registered substances detected in drinking water media commonly met the PMT/vPvM criteria, such as in RW (39 %, or 49 out of 125 substances), GW (38 %, or 63 out of 165 substances), and DW (37 %, or 69 out of 186 substances). The third is that the log  $K_{OC}$  cut-off value of 4.0 for the mobility criterion captured between 95 and 100 % of the P/vP substances detected in the four drinking water relevant media. This indicates that the mobility criterion based on log  $K_{OC}$  is fit-for-purpose. Registrants, water authorities and regulators are encouraged to take immediate action for the 110 REACH registered PMT/vPvM substances that were detected in drinking water relevant media to minimise any future emissions into the aquatic environment.

**Kurzbeschreibung: PMT/vPvM-Bewertung von REACH-registrierten Stoffen, die in Kläranlagenablauf, Süßwasserressourcen und Trinkwasser detektiert werden**

Es wurde eine Literaturrecherche durchgeführt, um eine Liste der Stoffe zu erstellen, die bereits in Kläranlagenablauf (WTPE, 442 Stoffe), Oberflächengewässer (SW, 1021 Stoffe), Uferfiltrat (BF, 114 Stoffe), Grundwasser (GW, 338 Stoffe), Rohwasser (RW, 212 Stoffe) und Trinkwasser (DW, 385 Stoffe) detektiert wurden. 639 Stoffe wurden in mindestens einem der vier trinkwasserrelevanten Medien (BF, GW, RW und DW) detektiert, von denen waren 311 (49 %) REACH-registrierte Stoffe (Stand September 2019). Insgesamt wurden 1289 Stoffe in mindestens einem der sechs betrachteten Wassermedien (WTPE, SW, BF, GW, RW und DW) detektiert, von denen 509 (39 %) REACH-registrierte Stoffe waren. Für jeden dieser 509 Stoffe wurde eine PMT/vPvM-Bewertung durchgeführt. Die PMT/vPvM-Kriterien erfüllten 22 % (110 von 509) aller detektierten Stoffe und sogar 30 % (92 von 311) der in trinkwasserrelevanten Medien detektierten Stoffen; weitere 5 % (23 von 509) Substanzen erfüllten die Kriterien für Persistenz und Mobilität, sind aber derzeit ohne abschließende Bewertung, ob das Toxizitätskriterium erfüllt ist. 27 % (136 von 509) der detektierten REACH-registrierten Stoffe sind ohne eindeutige Bewertung, ob die PMT/vPvM-Kriterien erfüllt waren; für weitere 20 % (103 von 509) fehlen Daten, um eine PMT/vPvM-Bewertung durchzuführen. Als Nicht-

PMT/vPvM-Stoffe wurden nur 26 % (137 von 509) der detektierten REACH-registrierten Stoffe bewertet.

Aus dieser Literaturrecherche können drei wichtige Schlussfolgerungen gezogen werden. Die erste ist, dass REACH-registrierte Stoffe in trinkwasserrelevanten Medien häufig (49 % aller nachgewiesenen Stoffe) und oft über 0,1 µg/L (58 % der REACH-registrierten Stoffe) detektiert werden. Die zweite ist, dass trotz Datenlücken die PMT/vPvM-Bewertung zeigt, dass sehr viele in Trinkwassermedien detektierten REACH-registrierten Stoffe die PMT/vPvM-Kriterien erfüllen, so z. B. in RW (39 % oder 49 von 125 Stoffen), GW (38 % oder 63 von 165 Stoffen) und DW (37 % oder 69 von 186 Stoffen). Die dritte ist, dass der log KOC-Grenzwert von 4,0 für das Mobilitätskriterium zwischen 95 und 100 % der in den vier trinkwasserrelevanten Medien detektierten P/vP-Stoffe erfasst. Dies zeigt die Eignung des auf dem log KOC basierenden Mobilitätskriterium. Registranten, Wasserbehörden und Regulierungsbehörden werden dazu angehalten, für die in trinkwasserrelevanten Medien detektierten 110 REACH-registrierten PMT/vPvM-Stoffe unverzüglich Maßnahmen zu ergreifen um künftige Emissionen in die aquatische Umwelt zu minimieren.

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## List of abbreviations

BF	Bank Filtrate
CLP	Regulation 1272/2008/EC on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
CMR	Carcinogenic, mutagenic, toxic for reproduction
DNEL	Derived no effect level
D <sub>ow</sub>	Octanol-water distribution coefficient for all species
DT50	The half-life of a substance
DW	Drinking water
EDC	Endocrine Disrupting
GW	Groundwater
InChI	International Chemical Identifier
log K <sub>oc</sub>	Soil sorption coefficient normalized to the total organic carbon
M	Mobile
P	Persistent
PBT	Persistent, bioaccumulative and toxic
Pro S.P.	A previously developed IT Tool by ECHA for chemical substance data
PM	Persistent and mobile
PMT	Persistent, mobile and toxic
QSAR	Quantitative structure activity relationship
REACH	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
RW	Raw water
SMILES	Simplified molecular-input line-entry system
STOT RE	Specific target organ toxicity - repeat exposure
T	Toxic
TPA	Tonnes per annum
vP	Very persistent
vM	Very mobile
vPvB	Very persistent and very bioaccumulative
vPvM	Very persistent and very mobile

## Summary

Many REACH registered substances are polluting the sources of our drinking water. The most likely to do so are those that are emitted in high volumes and/or fulfil the criteria of being persistent, mobile and toxic (PMT) or very persistent and very mobile (vPvM). To obtain a comprehensive overview of the identity and properties of substances contaminating the sources of our drinking water, this study compiled diverse water monitoring studies for two purposes. The first was to identify how many detected substances are registered under REACH. The second was to identify if those that are persistent and mobile substances have a higher likelihood of being detected in drinking water relevant media.

### Detected REACH registered substances in diverse water media

A literature review was conducted to compile a list of substances detected in wastewater treatment plant effluent (WTPE), surface water (SW), bank filtrate (BF), groundwater (GW), raw water (RW) and drinking water (DW). In total, 55 studies (published between 2000 and 2019) were consulted, and collectively they reported 1289 substances in total that were detected in at least one of the six water media considered (WTPE, SW, BF, GW, RW and DW). With 1021 substances (across 6 studies), most were detected in SW. The two water media with the fewest detected substances were BF (114 substances across 7 studies) and RW (212 substances across 6 studies). One reason for this could be that sampling campaigns of BF and RW require coordination with local authorities and water producers, including access to wells in protected areas. More substances were detected in DW (385 substances across 22 studies) and GW (338 substances across 15 studies). Sampling campaigns of DW and GW only require either access to a tap or an accessible groundwater well, respectively. In WTPE, there were 442 substances detected across 12 studies.

From a comparison with the REACH registration database as of September 2019, 509 (39 %) of the 1289 detected unique chemical structures were substances registered under REACH. Considering only the drinking water relevant media (BF, GW, RW and DW), there were 639 detected substances, and of these 311 (49 %) were REACH registered. This confirms that a considerable fraction of detected substances in drinking water relevant media are REACH registered. Of these, nearly half (147 of 311) were registered at volumes > 10 tpa. This may seem counterintuitive based on the expectation that the higher the production and import tonnage, the higher the chance of emissions. However, there are several potential explanations for this. The main one being that PMT/vPvM substances can appear in drinking water sources even when they are emitted at low levels because of their intrinsic substance properties. Another explanation is that some of the substances were not registered at volumes > 10 tpa in 2019 but were in previous years. A third explanation is that certain emission pathways can lead to contamination, even at low tonnages. For instance, substances in products that are poured down the drain (e.g. detergents) or that commonly occur in consumer products have a greater chance of being detected in the environment (Schulze et al., 2018). A fourth explanation is that non-industrial uses of REACH registered substances, such as uses as pharmaceuticals and plant protection products, may also contribute to emissions.

For each substance that was detected, the maximum reported concentration was compiled. In all six water media considered, REACH registered substances had a higher chance of being detected at > 0.1 µg/L, which is a commonly used threshold concentration, such as in the drinking water directive (EU Regulation 98/83/EC) for pesticides. 58% of substance registered under REACH were reported at least once at concentrations > 0.1 µg/L, compared to only 49% of all substances.

## Frequency of persistent and mobile substances in drinking water relevant media

A PMT/vPvM assessment of the detected REACH registered substances was conducted in accordance with Arp and Hale (2023). From this comparison it was clear that a PMT/vPvM substance in the REACH registration database has a significantly higher likelihood to be detected in drinking water relevant media than the other substances. Among the entire REACH registration database only 2.6 % (343 of 13406) of identified, unique chemical structures fulfil the PMT/vPvM criteria; whereas, amongst the four drinking water relevant media, 30% (92 of 311) of the detected REACH registered substances met the PMT/vPvM criteria. In other words, a PMT/vPvM substance in the REACH registration database has an 11.5 times higher chance of being detected (chi-square test highly significant with X-squared = 378.22, Degrees of freedom = 1, p-value < 2.2e-16) than the other substances in the REACH registration database. Just looking separately at GW, RW and DW, the percentages of detected substances meeting the PMT/vPvM criteria are even higher, being 38% (63 out of 165), 39% (49 out of 125) and 37% (69 out of 186) respectively. This trend is expected, as substances with the intrinsic properties of persistence and mobility are the ones with the greatest propensity to be detected in drinking water relevant media (Arp and Hale, 2019).

The majority of "Not PMT/vPvM" substances detected in the four drinking water relevant media are "Not P", rather than "Not M". For instance, in BF, 22% (14 out of 60) of substances were "Not P" compared to 2% (1 out of 60) that were "Not M". For GW this percentage was 15% (25 out of 165) "Not P" compared to 2% (3 out of 165) "Not M", for RW it was 18% (23 out of 125) "Not P" compared to 5% (6 out of 125) "Not M", and for DW it was 19% (35 out of 186) "Not P" compared to 2% (3 out of 186) "Not M". The fact that "Not P" substances have been detected in water media is likely due to: a) large or widespread emissions or b) local biodegradation processes that are slower than simulation studies.

As the presence of these Not PMT/vPvM substances could be due to a close proximity to the point of emissions, concentrations of these substances in the sources of drinking water could be reduced through emission reduction and via remediation. However, for substances that meet the PMT/vPvM criteria and are detected in drinking water relevant media, their presence can continue over much longer temporal and spatial scales, even after emission reductions have occurred (Hale et al., 2022, 2020). As remediation measures are inefficient for such substances, they are best managed at the production and use stages, via risk governance or risk mitigation strategies.

The central recommendations to manufacturers, importers, downstream users, local authorities, water suppliers, and regulators from the European Commission, ECHA and member states are to act to reduce pollution of the to date detected PMT/vPvM substances in the sources of our drinking water. In most cases this involves more monitoring, improved risk assessments, and the identification of sources. Such action will assist the development risk mitigation measures to reduce emissions and will encourage preventative measures of future emissions. When this does not work, regulatory action such as authorization and restriction through REACH may be needed.

## Zusammenfassung

Viele in der REACH-Verordnung registrierte Stoffe verschmutzen die Ressourcen unserer Trinkwässer. Am wahrscheinlichsten solche, die in hohen Mengen emittiert werden und/oder die Kriterien für persistent, mobil und toxisch (PMT) oder sehr persistent und sehr mobil (vPvM) erfüllen. Um einen umfassenden Überblick über Identität und Eigenschaften von Stoffen zu erhalten, die die Ressourcen unserer Trinkwässer verunreinigen, wurden in dieser Studie Wassermonitoringstudien ausgewertet mit zwei Zielsetzungen. Erstens, zu ermitteln, wie viele der detektierten Stoffe im Rahmen der REACH-Verordnung registriert sind. Zweitens, festzustellen, ob persistente und mobile Stoffe eine höhere Wahrscheinlichkeit haben, in den trinkwasserrelevanten Medien detektiert zu werden.

### Nachgewiesene REACH-registrierte Stoffe in diversen Wassermedien

Es wurde eine Literaturrecherche durchgeführt, um eine Liste der Stoffe zu erstellen, die bereits in Kläranlagenablauf (WTPE), Oberflächengewässer (SW), Uferfiltrat (BF), Grundwasser (GW), Rohwasser (RW) und Trinkwasser (DW) detektiert wurden. Insgesamt wurden 55 Studien (veröffentlicht zwischen 2000 und 2019) konsultiert, die insgesamt 1289 Stoffe meldeten, die in mindestens einem der sechs betrachteten Wassermedien (WTPE, SW, BF, GW, RW und DW) detektiert wurden. Mit 1021 Stoffen (in sechs Studien) wurden die meisten in SW detektiert. Die beiden Wassermedien mit den geringsten detektierten Stoffen waren BF (114 Stoffe in 7 Studien) und RW (212 Stoffe in 6 Studien). Ein Grund dafür könnte darin liegen, dass Probenahmekampagnen für BF und RW eine Koordinierung mit lokalen Behörden und Wassererwerken erfordern, einschließlich des Zugangs zu Bohrlöchern in Wasserschutzgebieten. In DW (385 Stoffe in 22 Studien) und GW (338 Stoffe in 15 Studien) wurden mehr Stoffe detektiert. Monitoringkampagnen für DW und GW erfordern nur einen Wasserhahn bzw. den Zugang zu einem gut zugänglichen Grundwasserbohrloch. In WTPE wurden in 12 Studien 442 Stoffe detektiert.

Bei einem Vergleich mit der REACH-Registrierungsdatenbank Stand September 2019 handelte es sich bei 509 (39 %) der 1289 detektierten chemischen Strukturen um Stoffe, die im Rahmen von REACH registriert waren. Bei Betrachtung nur der trinkwasserrelevanten Medien (BF, GW, RW und DW) waren 311 (49 %) der 639 detektierten Stoffe REACH-registriert. Dies bestätigt, dass ein erheblicher Teil der detektierten Stoffe in trinkwasserrelevanten Medien unter REACH registriert ist. Davon wurden fast die Hälfte (147 von 311) mit Mengen > 10 tpa registriert. Dies mag widersinnig erscheinen da erwartet werden kann, dass die Wahrscheinlichkeit von Emissionen umso größer ist, je größer die Produktions- und Importmengen sind. Es gibt jedoch mehrere mögliche Erklärungen. Die wichtigste ist, dass PMT/vPvM-Stoffe aufgrund ihrer intrinsischen Stoffeigenschaften in den Ressourcen unserer Trinkwässer vorkommen können, auch wenn sie nur in geringen Mengen emittiert werden. Eine weitere Erklärung ist, dass einige der detektierten Stoffe 2019 nicht mehr in Mengen > 10 tpa registriert waren, aber in den Vorjahren. Eine dritte Erklärung ist, dass bestimmte Emissionswege auch in geringen Mengen zu Verunreinigungen führen können. So haben beispielsweise Stoffe in Produkten, die in den Abfluss gegossen werden (z. B. Detergenzien) oder in Konsumgütern häufig vorkommen, eine größere Wahrscheinlichkeit, in der Umwelt detektiert zu werden (Schulze et al., 2018). Eine vierte Erklärung ist, dass die nichtindustriellen Verwendungen von in der REACH-Verordnung registrierten Stoffen, wie Verwendungen als Arzneimittel und Pflanzenschutzmittel, ebenfalls zu Emissionen beitragen können.

Für jeden detektierten Stoff wurde die maximale gemeldete Konzentration ermittelt. In allen sechs untersuchten Wassermedien hatten REACH-registrierte Stoffe eine höhere Wahrscheinlichkeit, bei  $> 0,1 \mu\text{g/l}$  detektiert zu werden, was eine häufig verwendete Schwellenkonzentration ist, wie z.B. in der Trinkwasserrichtlinie (EU-Verordnung 98/83/EG) für Pestizide. 58 % der REACH-registrierten Stoffe wurden mindestens einmal in Konzentrationen von  $> 0,1 \mu\text{g/l}$  gemeldet, im Vergleich zu nur 49 % aller Stoffe.

### **Häufigkeit persistenter und mobiler Stoffe in trinkwasserrelevanten Medien**

Eine PMT/vPvM-Bewertung aller detektierten REACH-registrierten Stoffe wurde gemäß Arp und Hale (2023) durchgeführt. Aus diesem Vergleich ging eindeutig hervor, dass ein PMT/vPvM-Stoff in der REACH-Registrierungsdatenbank eine wesentlich höhere Wahrscheinlichkeit besitzt, in trinkwasserrelevanten Medien detektiert zu werden als die andere Stoffen. Von der gesamten REACH-Registrierungsdatenbank erfüllen nur 2,6 % (343 von 13406) der identifizierten, einzigartigen chemischen Strukturen die PMT/vPvM-Kriterien. Gleichzeitig erfüllen aber in den vier trinkwasserrelevanten Medien 30 % (92 von 311) der detektierten REACH-registrierten Stoffe die PMT/vPvM-Kriterien. Mit anderen Worten hat ein PMT/vPvM-Stoff in der REACH-Registrierungsdatenbank eine 11,5-mal höhere Wahrscheinlichkeit detektiert zu werden (chi-Quadrat-Test mit X-Quadrat = 378.22, Grad der Freiheit = 1, p-Wert  $< 2.2\text{e-}16$ ) als die anderen Stoffe in der REACH-Registrierungsdatenbank. Bei getrennter Betrachtung von GW, RW und DW sind die Prozentsätze der detektierten Stoffe, die die PMT-/vPvM-Kriterien erfüllen, mit 38 % (63 von 165), 39 % (49 von 125) bzw. 37 % (69 von 186) sogar noch höher. Dieser Trend wird erwartet, da Stoffe mit den intrinsischen Stoffeigenschaften Persistenz und Mobilität diejenigen sind, die in trinkwasserrelevanten Medien die größten Tendenzen aufweisen detektiert zu werden (Arp und Hale, 2019).

Die meisten in den vier trinkwasserrelevanten Medien detektierten „Nicht-PMT/vPvM“-Stoffe sind „nicht P“ und nur wenige sind „nicht M“. So waren beispielsweise in BF 22 % (14 von 60) der Stoffe „nicht P“ im Vergleich zu 2 % (1 von 60), die „nicht M“ waren. Für GW betrug dieser Prozentsatz 15 % (25 von 165) „nicht P“ gegenüber 2 % (3 von 165) „nicht M“, für RW 18 % (23 von 125) „nicht P“ gegenüber 5 % (6 von 125) „nicht M“ und für DW 19 % (35 von 186) „nicht P“ gegenüber 2 % (3 von 186) „nicht M“. Die Tatsache, dass „Nicht-P“-Stoffe in Wassermedien detektiert wurden, ist vermutlich zurückzuführen auf a) große oder weit verbreitete Emissionen oder b) lokale biologische Abbauprozesse, die langsamer sind als Simulationsstudien.

Da das Vorhandensein dieser Nicht-PMT/vPvM-Stoffe auf die Nähe zur Quelle der Emission zurückzuführen sein könnte, könnten die Konzentrationen dieser Stoffe in den Ressourcen unserer Trinkwässer durch Minimierung der Emissionen und durch Wasseraufbereitung verringert werden. Bei Stoffen, die die PMT-/vPvM-Kriterien erfüllen und in trinkwasserrelevanten Medien detektiert werden, kann ihr Vorhandensein auch nach Minimierung der Emissionen über längere zeitliche und größere räumliche Skalen bestehen bleiben (Hale et al., 2022, 2020). Da die Wasseraufbereitung für solche Stoffe ineffizient ist, werden sie am besten in der Produktions- und Nutzungsphase durch Risikobeherrschung oder Risikobegrenzungsstrategien gehandhabt.

Die zentralen Empfehlungen an Hersteller, Importeure, nachgeschaltete Anwender, lokale Behörden, Wasserversorger und Regulierer der Europäischen Kommission, der ECHA und der Mitgliedstaaten bestehen darin, die Verschmutzung der bisher in den Ressourcen unserer Trinkwässer detektierte PMT/vPvM-Stoffe zu verringern. In den meisten Fällen beinhaltet dies

mehr Monitoring, verbesserte Risikobewertungen und die Ermittlung von Quellen. Diese Maßnahmen unterstützen die Entwicklung von Risikobegrenzungsstrategien zur Emissionsreduzierung und fördern präventive Maßnahmen gegen künftige Emissionen. Falls dies nicht ausreichen sollte, könnten regulatorische Maßnahmen wie Zulassungspflicht und Beschränkungen unter REACH erforderlich sein.

This report is part of research project (FKZ 3719 65 408 0) that started in 2019 to address several aims related to the implementation and utilization of the PMT/vPvM criteria to assist REACH registrants, regulators, researchers and the water sector to help develop strategies for managing these hazardous substances. The key results of this project are presented in four reports:

Arp, H.P.H., Hale, S.E. (2023):

***REACH: Guidance and Methods for the Identification and Assessment of PMT/vPvM Substances.***

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Arp, H.P.H., Hale, S.E., Schliebner, I., Neumann, M. (2023):

***Prioritised PMT/vPvM substances in the REACH registration database.***

UBA TEXTE 21/2023. Neumann, M., Schliebner, I. [ed.], ISSN 1862-4804. German Environment Agency (UBA), Dessau-Roßlau, Germany, 177 pages

<https://www.umweltbundesamt.de/publikationen/prioritised-pmtvpvm-substances-in-the-reach>

Arp, H.P.H., Hale, S.E., Borchers, U., Valkov V., Wiegand, L., Zahn, D., Neuwald, I., Nödler, K. Scheurer, M. (2023):

***A prioritization framework for PMT/vPvM Substances under REACH for registrants, regulators, researchers and the water sector.***

UBA TEXTE 22/2023. Neumann, M., Schliebner, I. [ed.], ISSN 1862-4804. German Environment Agency (UBA), Dessau-Roßlau, Germany, 238 pages

<https://www.umweltbundesamt.de/publikationen/a-prioritization-framework-for-pmtvpvm-substances>

This report (UBA TEXTE 20/2023) is the second in the series, which presents an investigation of the number of substances detected in six water media that are in the REACH registration database and meet the PMT/vPvM criteria. The other three reports present: updated guidance and methods for the identification and assessment of PMT/vPvM substances registered under REACH (UBA TEXTE 19/2023); the UBA list of prioritized PMT/vPvM substances in the REACH registration database (UBA TEXTE 21/2023); and, a prioritization framework for PMT/vPvM substances under REACH for identifying which PMT/vPvM substances need the most urgent attention (UBA TEXTE 22/2023).

## 1 Introduction

Over the past twenty years, producers of European drinking water have been noticing an increasing amount of new, hydrophilic chemicals in their water supply, many of which exceed concentrations considered safe and in addition are expensive and difficult to remove (Pronk et al., 2021). The origins of these chemicals can be numerous, as the amount and diversity of novel substances is increasing globally (Wang et al., 2020). In 2008 it was already anticipated that the inclusion of the PBT/vPvB criteria in REACH would drive chemical innovation towards more hydrophilic and mobile substances that may appear in the sources of drinking water (Hogenboom et al., 2008). Until recently, it was not even possible to measure many of these hydrophilic substances included under REACH during environmental monitoring studies, due to a lack of interest or analytical methodologies. However, increasing observations of these substances in water supplies has prompted extended monitoring campaigns and emerging analytical methods for mobile chemicals (Neuwald et al., 2021; Pronk et al., 2021; Schulze et al., 2019).

Therefore, with the emergence of such studies, and the registration of more mobile substances under REACH, a review of water monitoring studies was carried out here to identify if REACH registered substances commonly detected in water media and also if REACH registered substances that are persistent and mobile have a significant higher likelihood to be detected in drinking water relevant media.

This is the first report to present an explicit investigation of the presence of REACH registered substances in a large variety of water media, as well as the first to correlate this with persistence and mobility.

## 2 Methods

### 2.1 Literature reviewed

The literature review for substances detected in wastewater treatment plant effluent (WTPE), surface water (SW), bank filtrate (BF), groundwater (GW), raw water (RW) and drinking water (DW) was carried out by searching for monitoring studies reported between the years 2000 to 2019. RW is defined as the water entering a drinking water production facility. The sources of RW can be BF, GW or SW. WTPE specifically refers to water after its treatment at a full-scale water treatment plant, and not to water sampled entering or within a water treatment plant.

The literature search was concluded on December 2019. It was performed using the search terms "organic chemical", "contaminant", "monitoring" and the full name of the water media, using Google Scholar (scholar.google.com) and Clarivate Web of Science (webofscience.com). As the focus was on detected substances, no search filter was applied for geographical region, water treatment technology, or local hydrogeological conditions. Additional monitoring studies that were provided to the authors from UBA and others during the data collection phase were also used.

The aim of the literature review was not to collect data for every substance ever detected in all water media in the entirety of peer-reviewed and grey literature. It was also not the aim to collect data for substances that were monitored for but were not detected. Rather, the aim of the literature review was to assemble a sufficiently large list of substances that have been detected to investigate the prevalence of REACH registered substances within the list and the distribution of the substance's PMT/vPvM conclusion. For this reason, monitoring studies with large numbers of organic chemicals, and, compilations of such monitoring studies were primarily consulted. In total, 55 studies were included (Table 1).

**Table 1: The 55 studies included in the literature review**

Grouped by wastewater treatment plant effluent (WTPE), surface water (SW), bank filtrate (BF), groundwater (GW), raw water (RW) and drinking water (DW)

Water Media	Citation Index	Full reference
Wastewater treatment plant effluent (WTPE) (442 detected substances)	W01	Ahrens, L., Felizeter, S., Sturm, R., Xie, Z., & Ebinghaus, R. (2009). Polyfluorinated compounds in wastewater treatment plant effluents and surface waters along the River Elbe, Germany. <i>Marine pollution bulletin</i> , 58(9), 1326-1333.
	W02	Botero-Coy, A. M., Martínez-Pachón, D., Boix, C., Rincón, R. J., Castillo, N., Arias-Marín, L. P., ... & Hernández, F. (2018). An investigation into the occurrence and removal of pharmaceuticals in Colombian wastewater. <i>Science of the total environment</i> , 642, 842-853.
	W03	Carballa, M., Omil, F., Lema, J. M., Llompарт, M., García-Jares, C., Rodríguez, I., ... & Ternes, T. (2004). Behavior of pharmaceuticals, cosmetics and hormones in a sewage treatment plant. <i>Water research</i> , 38(12), 2918-2926.
	W04	Deblonde, T., Cossu-Leguille, C., & Hartemann, P. (2011). Emerging pollutants in wastewater: a review of the literature. <i>International journal of hygiene and environmental health</i> , 214(6), 442-448.
	W05	Gracia-Lor, E., Sancho, J. V., Serrano, R., & Hernández, F. (2012). Occurrence and removal of pharmaceuticals in wastewater treatment plants at the Spanish Mediterranean area of Valencia. <i>Chemosphere</i> , 87(5), 453-462.
	W06	Köck-Schulmeyer, M., Villagrasa, M., de Alda, M. L., Céspedes-Sánchez, R., Ventura, F., & Barceló, D. (2013). Occurrence and behavior of pesticides in wastewater treatment plants and their environmental impact. <i>Science of the total environment</i> , 458, 466-476.
	W07	Behera, S. K., Kim, H. W., Oh, J. E., & Park, H. S. (2011). Occurrence and removal of antibiotics, hormones and several other pharmaceuticals in wastewater treatment plants of the largest industrial city of Korea. <i>Science of the Total Environment</i> , 409(20), 4351-4360.



Water Media	Citation Index	Full reference
	W08	Loos, R., Carvalho, R., António, D. C., Comero, S., Locoro, G., Tavazzi, S., ... & Jarosova, B. (2013). EU-wide monitoring survey on emerging polar organic contaminants in wastewater treatment plant effluents. <i>Water research</i> , 47(17), 6475-6487.
	W09	Miao, X. S., Bishay, F., Chen, M., & Metcalfe, C. D. (2004). Occurrence of antimicrobials in the final effluents of wastewater treatment plants in Canada. <i>Environmental science &amp; technology</i> , 38(13), 3533-3541.
	W10	Rosal, R., Rodríguez, A., Perdigón-Melón, J. A., Petre, A., García-Calvo, E., Gómez, M. J., ... & Fernández-Alba, A. R. (2010). Occurrence of emerging pollutants in urban wastewater and their removal through biological treatment followed by ozonation. <i>Water research</i> , 44(2), 578-588.
	W11	Stasinakis, A. S., Mermigka, S., Samaras, V. G., Farmaki, E., & Thomaidis, N. S. (2012). Occurrence of endocrine disrupters and selected pharmaceuticals in Aisonas River (Greece) and environmental risk assessment using hazard indexes. <i>Environmental Science and Pollution Research</i> , 19(5), 1574-1583.
	W12	UBA. (2018) PHARMS-UBA. V2-2018 version. Database Pharmaceuticals in the Environment. German Environment Agency. <a href="https://www.umweltbundesamt.de/en/database-pharmaceuticals-in-the-environment-0">https://www.umweltbundesamt.de/en/database-pharmaceuticals-in-the-environment-0</a> .
Surface water (SW) (1021 detected substances)	S01	Fang, W., Peng, Y., Muir, D., Lin, J., & Zhang, X. (2019). A critical review of synthetic chemicals in surface waters of the US, the EU and China. <i>Environment international</i> , 131, 104994.
	S02	Schulze, S., Zahn, D., Montes, R., Rodil, R., Quintana, J. B., Knepper, T. P., ... & Berger, U. (2019). Occurrence of emerging persistent and mobile organic contaminants in European water samples. <i>Water research</i> , 153, 80-90.
	S03	Huang, C., Jin, B., Han, M., Yu, Y., Zhang, G., & Arp, H. P. H. (2021). The distribution of persistent, mobile and toxic (PMT) pharmaceuticals and personal care products monitored across Chinese water resources. <i>Journal of Hazardous Materials Letters</i> , 2, 100026.
	S04	Kolkman, A., Vughs, D., Sjerps, R., Kooij, P.J., van der Kooi, M., Baken, K., Louisse, J. and de Voogt, P. (2021). Assessment of Highly Polar Chemicals in Dutch and Flemish Drinking Water and Its Sources: Presence and Potential Risks. <i>ACS ES&amp;T Water</i> , 1(4), pp.928-937.
	S05	Scheurer, M., Nödler, K., Freeling, F., Janda, J., Happel, O., Riegel, M., Müller, U., Storck, F.R., Fleig, M., Lange, F.T. and Brunsch, A., 2017. Small, mobile, persistent: Trifluoroacetate in the water cycle—overlooked sources, pathways, and consequences for drinking water supply. <i>Water research</i> , 126, pp.460-471.
	S06	UBA. (2018) PHARMS-UBA. V2-2018 version. Database Pharmaceuticals in the Environment. German Environment Agency. <a href="https://www.umweltbundesamt.de/en/database-pharmaceuticals-in-the-environment-0">https://www.umweltbundesamt.de/en/database-pharmaceuticals-in-the-environment-0</a> .
Bank filtrate (BF) (114 detected substances)	B01	Stepien, D. K., Regnery, J., Merz, C., & Püttmann, W. (2013). Behavior of organophosphates and hydrophilic ethers during bank filtration and their potential application as organic tracers. A field study from the Oderbruch, Germany. <i>Science of the total environment</i> , 458, 150-159.
	B02	Nagy-Kovács, Z., László, B., Fleit, E., Czichat-Mártonné, K., Till, G., Börnick, H., ... & Grischek, T. (2018). Behavior of organic micropollutants during river bank filtration in Budapest, Hungary. <i>Water</i> , 10(12), 1861.
	B03	Heberer, T., Verstraeten, I. M., Meyer, M. T., Mechlini, A., & Reddersen, K. (2001). Occurrence and fate of pharmaceuticals during bank filtration—preliminary results from investigations in Germany and the United States. <i>Journal of Contemporary Water Research and Education</i> , 120(1), 2.
	B04	Albergamo, V., Schollée, J. E., Schymanski, E. L., Helmus, R., Timmer, H., Hollender, J., & De Voogt, P. (2019). Nontarget screening reveals time trends of polar micropollutants in a riverbank filtration system. <i>Environmental science &amp; technology</i> , 53(13), 7584-7594.
	B05	Huang, C., Jin, B., Han, M., Yu, Y., Zhang, G., & Arp, H. P. H. (2021). The distribution of persistent, mobile and toxic (PMT) pharmaceuticals and personal care products monitored across Chinese water resources. <i>Journal of Hazardous Materials Letters</i> , 2, 100026.
	B06	Scheurer, M., Nödler, K., Freeling, F., Janda, J., Happel, O., Riegel, M., Müller, U., Storck, F.R., Fleig, M., Lange, F.T. and Brunsch, A., 2017. Small, mobile, persistent: Trifluoroacetate in the water cycle—overlooked sources, pathways, and consequences for drinking water supply. <i>Water research</i> , 126, pp.460-471.
	B07	UBA. (2018) PHARMS-UBA. V2-2018 version. Database Pharmaceuticals in the Environment. German Environment Agency. <a href="https://www.umweltbundesamt.de/en/database-pharmaceuticals-in-the-environment-0">https://www.umweltbundesamt.de/en/database-pharmaceuticals-in-the-environment-0</a> .
Groundwater (GW) (338 detected substances)	G01	Loos, R., Locoro, G., Comero, S., Contini, S., Schwesig, D., Werres, F., Balsaa, P., Gans, O., Weiss, S., Blaha, L., 2010. Pan-European survey on the occurrence of selected polar organic persistent pollutants in groundwater. <i>Wat. Res.</i> 44, 4115-4126.
	G02	EC, 2016. Groundwater Watch List: Pharmaceuticals Pilot Study: Monitoring Data Collection and Initial Analysis. p. 65.

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	G03	Barnes, K.K., Kolpin, D.W., Furlong, E.T., Zaugg, S.D., Meyer, M.T., Barber, L.B., 2008. A national reconnaissance of pharmaceuticals and other organic wastewater contaminants in the United States— I) Groundwater. <i>Sci. Total Environ.</i> 402, 192-200.	
	G04	Lapworth, D., Baran, N., Stuart, M., Ward, R., 2012. Emerging organic contaminants in groundwater: a review of sources, fate and occurrence. <i>Environ. Pollut.</i> 163, 287-303.	
	G05	Kuhlmann, B., Skark, C., Zullei-Seibert, N., 2010. Definition and assessment of chemicals relevant to drinking water within the framework of the EU regulation REACH and recommendations for screening for potentially critical substances [in German]. Research project FKZ No 363 01 241 funded by the German Environment Agency (UBA), Report by Institut für Wasserforschung (IfW) GmbH. Schwerte, Germany, p. 97.	
	G06	Zogorski, J.S., Carter, J.M., Ivahnenko, T., Lapham, W.W., Moran, M.J., Rowe, B.L., Squillace, P.J., Toccalino, P.L., 2006. Volatile organic compounds in the nation's groundwater and drinking-water supply wells. <i>US Geological Survey Circular</i> 1292, 101.	
	G07	Jurado, A., Vázquez-Suñé, E., Carrera, J., de Alda, M.L., Pujades, E., Barceló, D., 2012. Emerging organic contaminants in groundwater in Spain: a review of sources, recent occurrence and fate in a European context. <i>Sci. Total Environ.</i> 440, 82-94.	
	G08	Schulze, S., Zahn, D., Montes, R., Rodil, R., Quintana, J.B., Knepper, T.P., Reemtsma, T., Berger, U., 2019. Occurrence of emerging persistent and mobile organic contaminants in European water samples. <i>Wat. Res.</i> doi.org/10.1016/j.watres.2019.01.008	
	G09	Berg, M., Müller, S.R., Mühlemann, J., Wiedmer, A., Schwarzenbach, R.P., 2000. Concentrations and mass fluxes of chloroacetic acids and trifluoroacetic acid in rain and natural waters in Switzerland. <i>Environ. Sci. Technol.</i> 34, 2675-2683.	
	G10	Tollefsen, K. E., Nizzetto, L., & Huggett, D. B. (2012). Presence, fate and effects of the intense sweetener sucralose in the aquatic environment. <i>Science of the Total Environment</i> , 438, 510-516.	
	G11	Gebbink, W.A., van Asseldonk, L., van Leeuwen, S.P., 2017. Presence of emerging per- and polyfluoroalkyl substances (PFASs) in river and drinking water near a fluorochemical production plant in the Netherlands. <i>Environ. Sci. Technol.</i> 51, 11057-11065.	
	G12	Tröger, R., Klöckner, P., Ahrens, L., Wiberg, K., 2018. Micropollutants in drinking water from source to tap—method development and application of a multiresidue screening method. <i>Sci. Total Environ.</i> 627, 1404-1432.	
	G13	Kiefer, K., Du, L., Singer, H., & Hollender, J. (2021). Identification of LC-HRMS nontarget signals in groundwater after source related prioritization. <i>Water Research</i> , 196, 116994.	
	G14	Huang, C., Jin, B., Han, M., Yu, Y., Zhang, G., & Arp, H. P. H. (2021). The distribution of persistent, mobile and toxic (PMT) pharmaceuticals and personal care products monitored across Chinese water resources. <i>Journal of Hazardous Materials Letters</i> , 2, 100026.	
	G15	UBA. (2018) PHARMS-UBA. V2-2018 version. Database Pharmaceuticals in the Environment. German Environment Agency. <a href="https://www.umweltbundesamt.de/en/database-pharmaceuticals-in-the-environment-0">https://www.umweltbundesamt.de/en/database-pharmaceuticals-in-the-environment-0</a> .	
	Raw water (RW) (212 detected substances)	R01	Colin, A., Bach, C., Rosin, C., Munoz, J. F., & Dauchy, X. (2014). Is drinking water a major route of human exposure to alkylphenol and bisphenol contaminants in France? <i>Archives of environmental contamination and toxicology</i> , 66(1), 86-99.
		R02	Boiteux, V., Dauchy, X., Rosin, C., & Munoz, J. F. (2012). National screening study on 10 perfluorinated compounds in raw and treated tap water in France. <i>Archives of environmental contamination and toxicology</i> , 63(1), 1-12.
R03		Terzić, S., Senta, I., Ahel, M., Gros, M., Petrović, M., Barcelo, D., ... & Jovančić, P. (2008). Occurrence and fate of emerging wastewater contaminants in Western Balkan Region. <i>Science of the total environment</i> , 399(1-3), 66-77.	
R04		Huerta-Fontela, M., Galceran, M. T., & Ventura, F. (2011). Occurrence and removal of pharmaceuticals and hormones through drinking water treatment. <i>Water research</i> , 45(3), 1432-1442.	
R05		Sjerps, R.M., Brunner, A.M., Fujita, Y., Bajema, B., de Jonge, M., Bäuerlein, P.S., de Munk, J., Schriks, M. and van Wezel, A., (2021). Clustering and prioritization to design a risk-based monitoring program in groundwater sources for drinking water. <i>Environmental Sciences Europe</i> , 33(1), pp.1-13.	
R06		Focazio, M. J., Kolpin, D. W., Barnes, K. K., Furlong, E. T., Meyer, M. T., Zaugg, S. D., ... & Thurman, M. E. (2008). A national reconnaissance for pharmaceuticals and other organic wastewater contaminants in the United States—II) Untreated drinking water sources. <i>Science of the total Environment</i> , 402(2-3), 201-216.	
Drinking water (DW) (385 detected substances)	D01	Kaboré, H.A., Duy, S.V., Munoz, G., Méité, L., Desrosiers, M., Liu, J., Sory, T.K., Sauvé, S., 2018. Worldwide drinking water occurrence and levels of newly-identified perfluoroalkyl and polyfluoroalkyl substances. <i>Sci. Total Environ.</i> 616, 1089-1100.	
	D02	Kuhlmann, B., Skark, C., Zullei-Seibert, N., 2010. Definition and assessment of chemicals relevant to drinking water within the framework of the EU regulation REACH and recommendations for screening	

Water Media	Citation Index	Full reference
		for potentially critical substances [in German]. Research project FKZ No 363 01 241 funded by the German Environment Agency (UBA), Report by Institut für Wasserforschung (IfW) GmbH. Schwerte, Germany, p. 97.
	D03	Stackelberg, P.E., Gibs, J., Furlong, E.T., Meyer, M.T., Zaugg, S.D., Lippincott, R.L., 2007. Efficiency of conventional drinking-water-treatment processes in removal of pharmaceuticals and other organic compounds. <i>Sci. Total Environ.</i> 377, 255-272.
	D04	Benotti, M.J., Trenholm, R.A., Vanderford, B.J., Holady, J.C., Stanford, B.D., Snyder, S.A., 2008. Pharmaceuticals and endocrine disrupting compounds in US drinking water. <i>Environ. Sci. Technol.</i> 43, 597-603.
	D05	Tröger, R., Klöckner, P., Ahrens, L., Wiberg, K., 2018. Micropollutants in drinking water from source to tap-method development and application of a multiresidue screening method. <i>Sci. Total Environ.</i> 627, 1404-1432.
	D06	Gebbink, W.A., van Asseldonk, L., van Leeuwen, S.P., 2017. Presence of emerging per- and polyfluoroalkyl substances (PFASs) in river and drinking water near a fluorochemical production plant in the Netherlands. <i>Environ. Sci. Technol.</i> 51, 11057-11065.
	D07	Loraine, G.A., Pettigrove, M.E., 2006. Seasonal variations in concentrations of pharmaceuticals and personal care products in drinking water and reclaimed wastewater in southern California. <i>Environ. Sci. Technol.</i> 40, 687-695.
	D08	Kavcar, P., Odabasi, M., Kitis, M., Inal, F., Sofuoglu, S.C., 2006. Occurrence, oral exposure and risk assessment of volatile organic compounds in drinking water for Izmir. <i>Wat. Res.</i> 40, 3219-3230.
	D09	Mompelat, S., Le Bot, B., Thomas, O., 2009. Occurrence and fate of pharmaceutical products and by-products, from resource to drinking water. <i>Environ. Int.</i> 35, 803-814.
	D10	Schriks, M., Heringa, M.B., van der Kooij, M.M., de Voogt, P., van Wezel, A.P., 2010. Toxicological relevance of emerging contaminants for drinking water quality. <i>Wat. Res.</i> 44, 461-476.
	D11	Stepien, D.K., Diehl, P., Helm, J., Thoms, A., Püttmann, W., 2014. Fate of 1, 4-dioxane in the aquatic environment: From sewage to drinking water. <i>Wat. Res.</i> 48, 406-419.
	D12	Boutonnet, J.C., Bingham, P., Calamari, D., Rooij, C.d., Franklin, J., Kawano, T., Libre, J.-M., McCulloch, A., Malinverno, G., Odom, J.M., 1999. Environmental risk assessment of trifluoroacetic acid. <i>Human and Ecological Risk Assessment: An International Journal</i> 5, 59-124.
	D13	Zahn, D., Frömel, T., Knepper, T.P., 2016. Halogenated methanesulfonic acids: A new class of organic micropollutants in the water cycle. <i>Wat. Res.</i> 101, 292-299.
	D14	UBA, 2018. Liste der nach GOW bewerteten Stoffe, <a href="http://www.umweltbundesamt.de/dokument/liste-nach-gow-bewerteten-stoffe">www.umweltbundesamt.de/dokument/liste-nach-gow-bewerteten-stoffe</a>
	D15	Kolkman, A., Vughs, D., Sjerps, R., Kooij, P.J., van der Kooij, M., Baken, K., Louisse, J. and de Voogt, P. (2021). Assessment of Highly Polar Chemicals in Dutch and Flemish Drinking Water and Its Sources: Presence and Potential Risks. <i>ACS ES&amp;T Water</i> , 1(4), pp.928-937.
	D16	Huang, C., Jin, B., Han, M., Yu, Y., Zhang, G., & Arp, H. P. H. (2021). The distribution of persistent, mobile and toxic (PMT) pharmaceuticals and personal care products monitored across Chinese water resources. <i>Journal of Hazardous Materials Letters</i> , 2, 100026.
	D17	UBA. (2018) PHARMS-UBA. V2-2018 version. Database Pharmaceuticals in the Environment. German Environment Agency. <a href="https://www.umweltbundesamt.de/en/database-pharmaceuticals-in-the-environment-0">https://www.umweltbundesamt.de/en/database-pharmaceuticals-in-the-environment-0</a> .
	D18	UBA (2019) Occurrence of chemical substances in drinking-water. Compilation of compliance data from Germany and other EU countries. German Environmental Agency. Unpublished Draft document (Dec 3., 2019)
	D19	Scheurer, M., Nödler, K., Freeling, F., Janda, J., Happel, O., Riegel, M., Müller, U., Storck, F.R., Fleig, M., Lange, F.T. and Brunsch, A., 2017. Small, mobile, persistent: Trifluoroacetate in the water cycle—overlooked sources, pathways, and consequences for drinking water supply. <i>Water research</i> , 126, pp.460-471.
	D20	EU Regulation 98/83/EC
	D21	EurEau, 2017. "PMOCs – Relevance and Consequences for Drinking Water Supply". Presented at the Workshop, "PMOCs in the Water Cycle", Leipzig, 23rd-24th November, 2017.
	D22	Berger, U., Schulze, S., Zahn, D., Montes, R., Rodil, R., Knepper, T.P., Quintana, J.B., Reemtsma, T., 2017. "Analysis of PMOCs and their occurrence in European waters." Presented at the Workshop: PMOCs in the Water Cycle, Leipzig, 23rd-24th November 2017.

## 2.2 Data collected

The 55 studies were reviewed and the chemical names and other identifiers (e.g. CAS number, EC number, etc.), as well as maximum reported concentrations of each detected substance were extracted.

The maximum concentration was used because it was the only consistently reported value across the monitoring literature. There were some studies that only reported median values and no average values, while others reported either geometric or arithmetic averages and no median value. The monitoring studies also varied in how they dealt with data below the limits of detection or quantification when deriving these median and average statistic values. The second reason the maximum concentration was used was because the maximum concentration represents the worst-case, real world exposure scenario and can be considered as representing the use of a precautionary approach.

The list of substances was also checked to ensure that monitoring data for the same substance were combined before identifying the maximum concentrations. For this, the term "unique chemical structure" is introduced. This was necessary as different chemical identifiers, particularly name, CAS or EC numbers, are often used for the same unique chemical structure. For instance, a "sodium acetate" (CAS 127-09-3 anhydrous and CAS 6131-90-4 trihydrate) and "potassium acetate" (CAS 127-08-2) could be considered as three chemical substances if only CAS numbers are used as the identifier. But here the "unique chemical structure" which is the same between them all is "acetic acid" (CAS 64-19-7), when the counterions and hydration state is not considered.

To identify unique chemical structures for each substance, the SMILES, InChI code and InChIKey were collected. If an InChIKey was not available, it was generated from the SMILES or InChI codes using the software OpenBabel ([http://openbabel.org/wiki/Main\\_Page](http://openbabel.org/wiki/Main_Page)). If SMILES, InChI codes or InChIKey were not available, then a SMILES was identified from the CAS number or Substance Name using the ChemAxon "Name to Structure" converter (<https://chemaxon.com/>), existing chemical databases as presented in Arp and Hale (2023), or manually through PubChem <https://pubchem.ncbi.nlm.nih.gov/>. Unique chemical structures were then organized based on their InChIKey, by ignoring the last character, which referred to the protonation state. It is noted that this approach is not specific to differentiating tautomers.

## 2.3. Presentation of data

The data in this report is presented in the order that describes a common environmental pathway of a persistent substance in urban areas: WTPE->SW->BF->GW->RW->DW. To elaborate, a persistent substance that is emitted into the urban wastewater infrastructure would pass through a wastewater treatment plant as WTPE before entering lakes or rivers (SW). The persistent substance could then travel from SW to BF if a nearby extraction well is present, or if not, reach GW. Following this, RW which can comprise water from SW, BF or GW, is treated to give DW. The DW is consumed and then excreted, enters the wastewater treatment plant, is emitted again as WTPE, and the persistent substance has then completed the anthropogenic water cycle and a full transport loop that can be repeated. The pathway described is just one circular pathway. Persistent substances emitted in urban/industrial areas with poor infrastructure, as well as pesticides in rural environments, can be directly emitted into SW or GW, before entering a DW source. Even in such shorter pathways of SW->DW or GW->DW, the persistent substances can be recycled with the water (Hale et al., 2022).

### **2.3 REACH registration database**

The REACH registration database as of September 2019 contained 22400 substances. After attempting to identify the chemical structures for as many of these registered substances as possible, using the method described in Arp and Hale (2023), there were 15474 substances for which information on the chemical structure could be found. Amongst these there were in total 12960 unique chemical structures. After consulting databases of transformation reactions (Arp and Hale, 2023), an additional 445 identifiable transformation products that were not already in the REACH registration database were added to the list, giving a total of 13405 unique chemical structures. This list was used to see how many of the detected unique chemical structures were REACH registered (as of September 2019).

### **2.4 PMT/vPvM assessment**

The PMT/vPvM assessment itself is presented for all REACH registered substances as of September 2019 as detailed in Arp and Hale (2023). Here the PMT/vPvM conclusion for each substance is presented using a traffic light colour scheme together with a text label (see Table 2).

**Table 2: Traffic light colour scheme representing the PMT/vPvM conclusion including the corresponding level of data availability**

Criteria or PMT/vPvM conclusion	Explanation
Insufficient data	Data missing or data quality too poor or inconsistent to make a screening level assessment
vP or vM	High quality data or sufficient weight-of-evidence that the criteria for vP or vM are met
vPvM	High quality data or sufficient weight-of-evidence that the criteria for vP and vM is met
vPvM & PMT	High quality data or sufficient weight-of-evidence that the criteria for vP, vM and T criteria are met
P, M or T	High quality data or sufficient weight-of-evidence that the criteria for P, M or T are met.
PMT	High quality data or sufficient weight-of-evidence that the criteria for P, M and T, or vP, M and T or P, vM and T are met
PM	High quality data or sufficient weight-of-evidence that the criteria for P and M, or vP and M, or P and vM are met, but there are currently no high-quality consensus conclusions that the criteria for T is met.
Potential P/vP++	Sufficient weight-of-evidence that the criteria for P is very likely met, and possibly the criteria for vP is met. This is considered as equivalent to P or in some cases vP when making weight-of-evidence conclusions that the criteria for PM, PMT and vPvM are met.
Potential P/vP, Potential M/vM or Potential T	Screening data or low-quality data indicates that the criteria for P/vP, M/vM or T could potentially be met. More high-quality data for sufficient weight-of-evidence is needed to reach a conclusion.
Potential PMT/vPvM	Screening data or low-quality data indicates that the criteria for P/vP and M/vM could potentially be met
Not P, Not M or Not T	High quality data or sufficient weight-of-evidence that the criteria for P, M or T are not met.
Not PMT/vPvM	High quality data or sufficient weight-of-evidence that either the criteria for P and/or M are not met

Source: Arp and Hale (2023)

## 3 Results

### 3.1 Detected substances

The highest number of substances were detected in SW, with 1021 unique chemical structures across 6 studies. This is due to three potential reasons: (1) SW is most commonly monitored within the six water media considered, (2) SW is contaminated by many different sources such as WTPE, agricultural sites and rural industries and (3) SW is the only media where there is no natural/engineered degradation or filtration that occurred above point of sampling. The two media with the fewest substances identified were BF (114 substances across 7 studies) and RW (212 substances across 6 studies). This is partly related to the fact that sampling campaigns of BF and RW require coordination with local authorities and water producers to access wells in protected areas. Therefore, reported monitoring studies of these media are comparatively rare. Many unique chemical structures could be identified in DW (385 substances across 22 studies) and GW (338 substances across 15 studies). DW and GW are easier to sample than BF and RW, as they only require either access to a tap or an accessible groundwater well, respectively. For WTPE, which also requires coordination with local authorities, but is inherently a more contaminated water media, there were 442 unique chemical structures found across 12 studies.

The entire list of 1289 substances detected in the selected water media is presented in Table 3. Maximum detected concentrations (max, ng/L) are reported in the columns WTPE = wastewater treatment plant effluent, SW = surface water; BF = bank filtrate; GW = Groundwater; RW = raw water; DW = drinking water, following path of likelihood to be consumed as drinking water from left to right. Substances are ordered in this list based on the number of media they were detected in, with substances detected in all 6 media on the top, and just one on the bottom. When substances are detected in five or fewer media, substances detected in DW are placed on the top, followed by RW, GW, BF, SW and WTPE.

Other information provided in these tables include:

**Chemical Identifiers** – The CAS, EC and full name of one REACH registered substance containing the unique chemical structure are presented in three columns, followed by the column "Other REACH substances & precursors" uses the formatting (x)-yyy. Where yyy is given in the priority EC, CAS if no EC, and InChIKey if no CAS, and (x) can be: (p) = monoconstituent substances; (s#) = multi-constituent substance/salt, where if the number is 1 it is the heaviest organic constituent in the mixture, 2 is the second heaviest (or equally heavy), etc. (t#) = refers to known the transformation products of yyy, with #=1 being the heaviest transformation product, #=2 the second heaviest, (t#-#) refers to second step transformation products, e.g. t1-2 is the second transformation product of the t1 transformation product of the yyy).

**PMT/vPvM Conclusion** – For REACH registered substances only: the PMT/vPvM conclusion is presented for a) the criteria proposed by the UBA in 2019 and b) the less stringent criteria proposed by the EC in 2021. The reason for a discrepancy between the two conclusions is exclusively due to the M/vM criteria and an explanation is presented. Note: "vP-WoE" means vP based on weight-of-evidence and corresponds to the weight-of-evidence conclusion "Potential P/vP++" (Arp and Hale, 2023).

**P-rationale** – Presents the conclusion for the P/vP assessment (either P, vP or "Potential P/P++", and the data or evidence to support this conclusion. "est. t1/2" refers to estimated half-life in water using a QSAR as part of weight-of-evidence (note that this QSAR as errors of a factor 10, Therefore, it is not the basis of the P conclusion), measured max t1/2 is a simulated half-life that is used directly for the persistency assessment if

available (Arp and Hale, 2023). This is only presented for REACH registered substances, non-REACH registered substances are labelled "n.a." for not available.

**M-rationale** – Presents the conclusion for the M/vM assessment using the criteria proposed by the UBA and the criteria proposed by the EC, along with the data (log K<sub>OC</sub> if available) or evidence (log K<sub>OW</sub>/log D<sub>OW</sub>) to support this conclusion. The terms "(2a), (2b), (2c)" refer to a weight-of-evidence approach (Arp and Hale, 2023). This is only presented for REACH registered substances; non-REACH registered substances are labelled "n.a." for not available.

**T-rationale** – Presents the conclusion for the T assessment (Arp and Hale, 2023) with abbreviations, including: Carc= carcinogenic; Mut= mutagenic; Rep = Reprotoxic; STOT-RE = Specific target organ toxicity; "Under\_Asses" = Under assessment by ECHA; "BroadConsensus" = Broad Consensus by ECHA, "Minority Opinion" = Minority opinion according to ECHA. "Pro. S.P. ED" means it was on a 2014 list from ECHA of suspected Endocrine Disruptors (Arp and Hale, 2023), EcoTox = meets the ecotoxicity criteria for T according to references provided in (Arp and Hale, 2023); DNEL=Derived no-effect level; Cramer Cl. III = Cramer class III indication. For more information please see Arp and Hale (2023). This is only presented for REACH registered substances; non-REACH registered substances are labelled "n.a." for not available.

**REACH tpa** – Presents if the substance was in the REACH database as of September 2019, and if so, with registration volumes > 10 tpa or < 10 tpa.

**Detection (ref index)** – refers to information about detecting in the following drinking water relevant media are available: WTPE = wastewater treatment plant effluent, SW = surface water, BF = Bank filtrate, GW = groundwater, RW = raw water, DW =drinking water, For more information about this column, refer to Table 1, which presents the reference index.



**Table 3: Detected substances wastewater treatment plant effluent, freshwater resources and drinking water, along with if they were registered under REACH (as of September 2019) or not.**

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
723-46-6	-	Sulfamethoxazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 30 ng/L (D10,D17,D16,D18,D21,D04) GW: max 7 300 ng/L (G04,G01,G02,G03,G07,G15,G13,G14) RW: max 12 ng/L (R03) BF: max 82 ng/L (B07,B02,B03) SW: max 48 699 000 ng/L (S01,S03) WTPE: max 8 263 000 ng/L (W12,W08,W02,W03,W04,W07,W09,W10)
117-96-4	204-223-6	3,5-diacetamido-2,4,6-triiodobenzoic acid		vPvM	vPvM	Potential P/vP++: inferred from presence in monitoring studies (UBA, 2019)	UBA: vM EC: vM min Dow=-0.6 (2b)	Cramer Cl.III	< 10	DW: max 1 200 ng/L (D09,D10) GW: max 1 000 ng/L (G02,G13) RW: max 70 ng/L (R05) BF: max 4 000 ng/L (B07) SW: max 100 000 ng/L (S06,S01) WTPE: max 8 400 000 ng/L (W08,W04,W12)
60166-93-0	-	Iopamidol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 100 ng/L (D10,D02) GW: max 2 400 ng/L (G04,G02) RW: max 63 ng/L (R05) BF: max 1 400 ng/L (B07) SW: max 1 223 000 ng/L (S06,S01) WTPE: max 170 981 ng/L (W12,W04,W08)
60-80-0	200-486-6	Phenazone		vPvM	vPvM	Potential P/vP++: inferred from presence in monitoring studies (UBA, 2019)	UBA: vM EC: vM exp log Koc=-0.8	-	< 10	DW: max 400 ng/L (D09,D18,D17,D02,D10) GW: max 3 950 ng/L (G02,G04,G13) RW: max 80 ng/L (R05) BF: max 1 250 ng/L (B07) SW: max 2 500 ng/L (S06,S01,S04,S03) WTPE: max 1 127 000 ng/L (W12,W04,W10)
57-68-1	200-346-4	Sulfadimidine		vPvM	vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 211d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: vM exp log Koc=0.7	Cramer Cl.III	< 10	DW: max 90 ng/L (D17,D16) GW: max 3 600 ng/L (G15,G14,G13,G04,G03,G05,G07) RW: max 0 ng/L (R03,R05) BF: max 6 ng/L (B07) SW: max 680 000 ng/L (S06,S01,S03) WTPE: max 640 ng/L (W12,W07,W09)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
95-14-7	202-394-1	Benzotriazole		vPvM & PMT	vPvM & PMT	vP: No degradation in OECD TG 309 (Hofman-Caris and Claßen, 2020). Calculated half-life was 1Hbenzotriazole: >10.000 days and majority of biodegradation screen tests, e.g. OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: vM EC: vM exp log Koc=1.5	(EDC_UnderAssess)	> 10	DW: max 200 ng/L (D10) GW: max 1 548 ng/L (G01,G02,G13) RW: max 172 ng/L (R05) BF: max 200 ng/L (B02) SW: max 18 303 ng/L (S01) WTPE: max 221 000 ng/L (W08)
58-08-2	200-362-1	Caffeine		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 A (Ready Biodegradability: DOC Die Away Test); OECD Guideline 301 A (Ready Biodegradability: DOC Die Away Test)	UBA: vM EC: vM exp log Koc=-0.6	-	> 10	DW: max 119 ng/L (D09,D03,D05,D16) GW: max 110 000 ng/L (G04,G01,G02,G03,G05,G07,G14) RW: max 402 ng/L (R05,R06) BF: max 43 ng/L (B03) SW: max 4 873 ng/L (S01,S01) WTPE: max 3 002 ng/L (W08,W07,W08,W10)
298-46-4	-	Carbamazepine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 601 ng/L (D17,D16,D18,D09,D21,D02,D03,D04,D05,D10) GW: max 99 194 ng/L (G04,G01,G02,G07,G13,G14,G15) RW: max 190 ng/L (R06,R05,R03,R04) BF: max 1 000 ng/L (B07,B02) SW: max 2 297 ng/L (S06,S01,S03) WTPE: max 51 278 ng/L (W12,W02,W04,W07,W08,W10)
15307-79-6	239-346-4	Sodium [2-[(2,6-dichlorophenyl)amino]phenyl]acetate	(s1)239-346-4; (p)239-348-5	vPvM & PMT	vPvM & PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 226d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: vM min Dow=0.7 (2a)	(ecological effects)	< 10	DW: max 114 ng/L (D17,D16) GW: max 590 ng/L (G04,G01,G02,G13,G15) RW: max 4 ng/L (R03) BF: max 430 ng/L (B07,B02) SW: max 15 033 ng/L (S06,S01) WTPE: max 54 015 ng/L (W12,W08,W04,W05,W07,W10,W11,W02)
15687-27-1	239-784-6	Ibuprofen		PMT	PMT	P: Carr et al. Water, Air, & Soil Pollution, 216(1), 633-642.	UBA: vM EC: M exp log Koc=2.8	(Ecotox_Envirotox)	< 10	DW: max 1 350 ng/L (D09,D07,D16,D17) GW: max 12 000 ng/L (G04,G01,G02,G03,G14,G15)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										RW: max 270 ng/L (R06,R05) BF: max 200 ng/L (B07) SW: max 39 137 ng/L (S06,S01,S03) WTPE: max 27 256 ng/L (W12,W03,W04,W05,W07,W08,W10,W11)
29878-31-7	-	4-Methylbenzotriazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 110 ng/L (D18) GW: max 100 ng/L (G13) RW: max 130 ng/L (R05) BF: max 118 ng/L (B02) SW: max 4 661 ng/L (S01) WTPE: max 24 300 ng/L (W08)
13674-84-5	237-158-7	Tris(2-chloro-1-methylethyl) phosphate		vPvM	PM	vP: Biodegradation results in 301C and E tests <20% and persistence due to PBT assessment. Therefore, this substance is assessed to be persistent in water. (Berger et al. 2018)	UBA: vM EC: M exp log Koc=2.2	Cramer Cl.III	< 10	DW: max 510 ng/L (D21) GW: detected (G08) RW: max 180 ng/L (R05) BF: max 958 ng/L (B01) SW: detected (S02) WTPE: max 21 000 ng/L (W08)
41859-67-0	-	Bezafibrate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 27 ng/L (D09,D17,D16,D02) GW: max 955 ng/L (G14) RW: max 0 ng/L (R03) BF: max 110 ng/L (B07) SW: max 15 060 ng/L (S06,S01,S03) WTPE: max 7 146 ng/L (W12,W04,W05,W08,W10)
125-33-7	-	Primidone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 40 ng/L (D09,D21) GW: max 12 000 ng/L (G04,G02,G13,G15) RW: max 200 ng/L (R04,R05) BF: max 40 ng/L (B07) SW: max 14 000 ng/L (S06,S01) WTPE: max 9 400 ng/L (W12)
479-92-5	-	Propyphenazone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 240 ng/L (D09,D18,D17) GW: max 1 250 ng/L (G04,G02,G07,G15) RW: max 17 ng/L (R05,R03) BF: max 1 465 ng/L (B07) SW: max 880 ng/L (S06,S01) WTPE: max 13 172 ng/L (W12)
137-58-6	205-302-8	Lidocaine		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 84d, and	UBA: vM EC: vM exp log Koc=1.6	Cramer Cl.III	< 10	DW: max 1 ng/L (D05) GW: max 10 000 ng/L (G02) RW: max 57 ng/L (R05)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						BIOWIN screen tool as recommended in the PBT guideline				BF: max 0 ng/L (B07) SW: max 438 ng/L (S06,S01,S03) WTPE: max 3 700 ng/L (W12)
80-05-7	201-245-8	4,4'-isopropylidenediphenol (bisphenol a)	(p)201-245-8; (s1)500-033-5; (s1)500-072-8; (s1)500-089-0; (s1)500-090-6; (p)500-097-4; (s1)500-104-0; (p)500-130-2; (s1)500-180-5; (s1)500-181-0; (s1)500-240-0; (s1)609-251-6; (s1)614-255-6; (p)904-653-0; (p)926-571-4; (s5)943-503-9	Not PMT/vPvM	Not PMT/vPvM	Not P: measured max t1/2.max(d): w=6(not P); s=7(not P); sed=2(not P)	UBA: vM EC: M exp log Koc=2.6	(SVHC: Toxic for reproduction (Article 57c)#Endocrine disrupting properties (Article 57(f) - environment)#Endocrine disrupting properties (Article 57(f) - human health))(Rep1)(EDC_UnderAssesses)	< 10* Was earlier a high volume substance	DW: max 420 ng/L (D02,D03,D04) GW: max 9 300 ng/L (G04,G01,G02,G07) RW: max 9 500 ng/L (R06,R05,R01,R03) BF: max 2 381 ng/L (B02,B03) SW: max 4 290 ng/L (S01,S03) WTPE: max 790 ng/L (W11)
37350-58-6	-	Metoprolol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 2 100 ng/L (D10,D17,D21,D02,D05,D10) GW: max 56 ng/L (G15) RW: max 380 ng/L (R04,R05) BF: max 30 ng/L (B07) SW: max 8 041 ng/L (S06,S01) WTPE: max 5 762 ng/L (W12,W04,W07,W10)
3930-20-9	-	Sotalol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 16 ng/L (D17,D05,D02) GW: max 16 ng/L (G07) RW: max 160 ng/L (R04) BF: max 370 ng/L (B07) SW: max 3 553 ng/L (S06,S01) WTPE: max 6 500 ng/L (W12,W04,W12)
51218-45-2	-	Metolachlor (H)		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 2 700 ng/L (D02,D21,D04) GW: max 5 370 ng/L (G07,G01) RW: max 670 ng/L (R06) BF: max 340 ng/L (B03) SW: max 660 ng/L (S01) WTPE: max 289 ng/L (W08)
138402-11-6	-	Irbesartan		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 30 ng/L (D18) GW: max 2 ng/L (G13) RW: max 830 ng/L (R04)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										BF: max 1 ng/L (B07) SW: max 959 ng/L (S06) WTPE: max 3 175 ng/L (W08,W02,W08,W12)
115-96-8	204-118-5	Tris(2-chloroethyl) phosphate		vPvM & PMT	PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 64d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: M min Dow=1.7 (2a)	(SVHC: Toxic for reproduction (Article 57c))(Carc2)(Rep1)(SINlist: Classified CMR according to Annex VI of Regulation 1272/2008)	< 10	DW: max 470 ng/L (D04,D21,D03) GW: max 740 ng/L (G04) RW: max 338 ng/L (R05,R03) BF: max 171 ng/L (B01) SW: max 2 683 ng/L (S01) WTPE: max 2 400 ng/L (W08)
53-86-1	200-186-5	Indometacin		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 94d, and consistency across all tested QSARs	UBA: vM EC: M exp log Koc=2.7	(Rep_BroadConsensus)	< 10	DW: max 5 ng/L (D17) GW: detected (G14) RW: max 0 ng/L (R03) BF: max 5 ng/L (B07) SW: max 2 323 ng/L (S06,S01,S03) WTPE: max 270 ng/L (W04)
15545-48-9	-	Chlortoluron		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D02) GW: max 1 700 ng/L (G07,G01,G13) RW: max 10 ng/L (R05) BF: detected (B04) SW: max 193 ng/L (S01) WTPE: max 184 ng/L (W08,W06,W08)
152019-73-3	-	Metolachlor-OA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 3 500 ng/L (D02) GW: max 58 ng/L (G13) RW: max 856 ng/L (R05) BF: max 88 ng/L (B02) SW: max 509 ng/L (S01) WTPE: -
143-24-8	205-594-7	Bis(2-(2-methoxyethoxy)ethyl) ether		vPvM & PMT	vPvM & PMT	vP: REACH Dossier conclusion, est. water t1/2 = 1 289d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: vM exp log Koc=-1.5	(Rep_BroadConsensus)	> 10	DW: detected (D21) GW: max 19 ng/L (G13) RW: max 120 ng/L (R05) BF: max 1 403 ng/L (B01) SW: max 317 ng/L (S01) WTPE: -
2008-58-4	TP of: 214-787-5	2,6-Dichlorobenzamide	(t1)214-787-5	insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 66d	UBA: vM EC: vM exp log Koc=0.4	Cramer Cl.III	< 10	DW: max 230 ng/L (D10) GW: max 82 ng/L (G13) RW: max 150 ng/L (R05) BF: detected (B04)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 128 ng/L (S01) WTPE: -
13013-17-7	235-867-6	(±)-1-(isopropylamino)-3-(naphthoxy)propan-2-ol		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 32d	UBA: vM EC: M exp log Koc=2.0	Cramer Cl.III	< 10	DW: max 7 ng/L (D17) GW: max 62 ng/L (G07,G05) RW: max 270 ng/L (R04) BF: - SW: max 590 ng/L (S06,S01) WTPE: max 120 297 000 ng/L (W12,W04)
57-62-5	-	Chlortetracycline		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: max 75 ng/L (G15,G14) RW: max 10 ng/L (R05) BF: - SW: max 688 702 ng/L (S06,S03) WTPE: max 90 900 ng/L (W12)
70458-96-7	-	Norfloxacin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: max 145 ng/L (G15,G14) RW: max 30 ng/L (R05,R03) BF: - SW: max 520 000 ng/L (S06,S01,S03) WTPE: max 420 000 ng/L (W12,W09,W02,W04)
93106-60-6	-	Enrofloxacin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 13 ng/L (D17,D16) GW: max 77 ng/L (G14) RW: max 40 ng/L (R06,R05) BF: - SW: max 25 000 ng/L (S06,S03) WTPE: max 210 000 ng/L (W12)
82419-36-1	-	Ofloxacin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 3 ng/L (D17,D16) GW: max 9 ng/L (G15,G14) RW: max 0 ng/L (R03) BF: - SW: max 11 735 ng/L (S06,S01,S03) WTPE: max 197 608 ng/L (W12,W10,W04)
72-14-0	-	Sulfathiazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 27 ng/L (D17,D02,D16) GW: max 80 ng/L (G15,G07,G14) RW: max 0 ng/L (R03) BF: - SW: max 1 882 ng/L (S06,S01,S03) WTPE: max 170 000 ng/L (W12)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
103-90-2	203-157-5	Paracetamol		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 19d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: vM exp log Koc=1.3	Cramer Cl.III	> 10	DW: max 210 ng/L (D09,D17,D16,D02,D03) GW: max 120 000 ng/L (G04,G02,G03,G07,G15) RW: max 402 ng/L (R05,R06) BF: - SW: max 4 121 ng/L (S06,S01,S03) WTPE: max 11 309 ng/L (W12,W02,W07)
104-40-5	203-199-4	p-nonylphenol		Not PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 20d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: Not M EC: Not M exp log Koc=4.6	(SVHC: Endocrine disrupting properties (Article 57(f) - environment))(S INlist: Substance is concluded to be an endocrine disruptor SVHC by ECHA Member State Committee.)	< 10	DW: max 1 100 ng/L (D03,D02,D04) GW: max 84 000 ng/L (G04,G01,G07) RW: max 605 ng/L (R01,R03) BF: - SW: max 1 690 ng/L (S01) WTPE: max 4 552 ng/L (W11)
25812-30-0	247-280-2	Gemfibrozil		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 24d	UBA: M EC: Not M exp log Koc=3.0	Cramer Cl.III	< 10	DW: max 288 ng/L (D17,D09,D16,D04,D02) GW: max 574 ng/L (G07,G15) RW: max 2 ng/L (R03) BF: - SW: max 17 036 ng/L (S06,S01,S03) WTPE: max 36 364 ng/L (W12,W04,W05,W07,W08,W10)
22204-53-1	244-838-7	Naproxen	(p)244-838-7; (p)247-485-7	Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 22d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: vM min Dow=-0.5 (2b)	Cramer Cl.III	< 10	DW: max 26 ng/L (D17,D02) GW: max 625 ng/L (G15,G05) RW: max 2 ng/L (R03) BF: - SW: max 12 000 ng/L (S06,S01,S03) WTPE: max 32 241 ng/L (W12,W02,W03,W04,W05,W07,W08,W10,W11)
68-35-9	200-685-8	Sulfadiazine		vPvM & PMT	vPvM & PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 185d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and	UBA: vM EC: vM exp log Koc=0.3	(STOTRE_Broad Consensus)	< 10	DW: max 6 ng/L (D16) GW: max 100 ng/L (G02,G05,G07,G15,G14) RW: max 50 ng/L (R05,R03) BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						consistent indications of P across tested QSARs				SW: max 30 500 ng/L (S06,S01,S03) WTPE: max 286 ng/L (W12,W08,W09)
61-68-7	-	Mefenamic acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 20 ng/L (D17,D16) GW: max 33 ng/L (G07,G14) RW: max 0 ng/L (R03) BF: - SW: max 27 500 ng/L (S06,S01,S03) WTPE: max 5 162 ng/L (W12,W07,W10)
1222-05-5	214-946-9	1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran		PMT	Not PMT/vPvM	vp: measured max t1/2.max(d): w=n.d.; s=239(vp); sed=79(not P)	UBA: M EC: Not M exp log Koc=3.8	(PBT_UnderAssess)(EDC_UnderAssess)(SINlist: For Galaxolide (HHCB) endocrine effects have been reported. It is potentially persistent and bioaccumulative . It has been frequently found in humans and the environment.)	> 10	DW: max 82 ng/L (D02) GW: max 23 000 ng/L (G04,G07) RW: max 3 ng/L (R03) BF: - SW: max 1 400 ng/L (S01,S03) WTPE: max 2 766 ng/L (W10,W03,W04,W10)
58-93-5	-	Hydrochlorothiazide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 117 ng/L (D17) GW: max 2 548 ng/L (G15,G13) RW: max 1 900 ng/L (R04) BF: - SW: max 2 436 ng/L (S06,S01) WTPE: max 17 589 ng/L (W12,W04,W10)
134-62-3	-	DEET		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 97 ng/L (D03,D02,D04,D10,D16) GW: max 6 500 ng/L (G04,G01,G13) RW: max 20 ng/L (R05,R03) BF: - SW: max 575 ng/L (S01,S03) WTPE: max 15 800 ng/L (W08)
127-79-7	-	Sulfamerazine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: max 745 ng/L (G07,G15) RW: max 20 ng/L (R05,R03) BF: -



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 15 000 ng/L (S06,S03) WTPE: max 35 ng/L (W12)
738-70-5	-	Trimethoprim		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 15 ng/L (D17,D16) GW: max 100 ng/L (G02,G05,G14,G15) RW: max 20 ng/L (R06) BF: - SW: max 11 258 ng/L (S06,S01,S03) WTPE: max 3 052 ng/L (W12,W02,W04,W07,W08,W10)
53-16-7	200-164-5	Estrone		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 83d, and consistency across all tested QSARs	UBA: M EC: Pot. M/vM min Dow=2.6 (2a)	(Rep_BroadConsensus)(Pro.S.P._ED)	> 10	DW: max 1 ng/L (D17) GW: max 45 ng/L (G04,G01,G15) RW: max 1 ng/L (R04) BF: - SW: max 3 500 ng/L (S06,S01,S03) WTPE: max 11 013 ng/L (W12,W03,W07)
22071-15-4	244-759-8	Ketoprofen	(s1)417-970-1; (s1)607-305-3; (p)244-759-8; (p)606-944-5	insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 21d	UBA: vM EC: vM min Dow=0.1 (2b)	Cramer Cl.III	< 10	DW: max 167 ng/L (D17,D09,D02,D16) GW: max 2 886 ng/L (G01,G02,G04,G07,G15) RW: max 2 ng/L (R03) BF: - SW: max 9 808 ng/L (S06,S01,S03) WTPE: max 10 806 ng/L (W12,W11,W04,W05,W07,W08,W10)
25057-89-0	-	Bentazone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 280 ng/L (D10,D05,D21) GW: max 10 550 ng/L (G01,G13) RW: max 60 ng/L (R05) BF: - SW: max 1 415 ng/L (S01,S01) WTPE: max 220 ng/L (W08)
54-31-9	-	Furosemide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 29 ng/L (D17) GW: max 100 ng/L (G02) RW: max 110 ng/L (R04) BF: - SW: max 2 670 ng/L (S06,S01) WTPE: max 9 965 ng/L (W12,W04,W10)
80214-83-1	-	Roxithromycin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 41 ng/L (D17,D17,D16) GW: max 4 ng/L (G15,G14) RW: max 0 ng/L (R03) BF: - SW: max 3 700 ng/L (S06,S01,S03)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										WTPE: max 9 913 ng/L (W12,W09,W04)
88407-82-3	618-161-6	Benzeneacetamide, 4-[2-hydroxy-3-[(1-methylethyl)amino]propoxy]-, (2E)-2-butenedioate (salt)		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 35d	UBA: vM EC: vM exp log Koc=-0.7	Cramer Cl.III	< 10	DW: max 34 ng/L (D17) GW: max 106 ng/L (G07,G15) RW: max 900 ng/L (R04) BF: - SW: max 8 199 ng/L (S06,S01) WTPE: max 7 602 ng/L (W12,W04,W07,W10)
57-63-6	-	Ethinylestradiol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 23 ng/L (D02) GW: max 1 ng/L (G15) RW: max 3 ng/L (R04) BF: - SW: max 5 900 ng/L (S06,S01,S03) WTPE: max 6 620 ng/L (W12)
85721-33-1	-	Ciprofloxacin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: max 770 ng/L (G15,G14) RW: max 30 ng/L (R06,R05) BF: - SW: max 2 561 ng/L (S06,S01,S03) WTPE: max 6 608 ng/L (W12,W09,W08,W02,W04,W10)
114-07-8	-	Erythromycin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 155 ng/L (D17,D16) GW: max 1 000 ng/L (G14,G15) RW: max 300 ng/L (R06) BF: - SW: max 2 246 ng/L (S06,S03) WTPE: max 6 316 ng/L (W12,W09,W04,W02,W04,W10)
1912-24-9	217-617-8	Atrazine		<b>vPvM &amp; PMT</b>	<b>vPvM &amp; PMT</b>	Potential P/vP++: estimated t1/2 (error factor 10) = 248d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: vM exp log Koc=1.4	(Ecotox_Envirotox)(Pro.S.P._ED)	< 10	DW: max 1 900 ng/L (D02,D21,D04) GW: max 3 450 ng/L (G07,G01,G13) RW: max 28 ng/L (R03) BF: - SW: max 5 170 ng/L (S01) WTPE: max 732 ng/L (W06,W08)
604-75-1	-	Oxazepam		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 90 ng/L (D17) GW: detected (G05) RW: max 46 ng/L (R04) BF: - SW: max 2 183 ng/L (S06,S01) WTPE: max 3 200 ng/L (W12,W08)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
5915-41-3	-	Terbutylazine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D21) GW: max 1 270 ng/L (G07,G01,G13) RW: max 0 ng/L (R03) BF: - SW: max 630 ng/L (S01) WTPE: max 2 411 ng/L (W08,W06)
83905-01-5	-	Azithromycin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 12 ng/L (D17,D14,D16) GW: max 1 ng/L (G15,G14) RW: max 30 ng/L (R05,R06) BF: - SW: max 2 356 ng/L (S06,S01,S03) WTPE: max 1 032 ng/L (W12,W02)
330-54-1	206-354-4	diuron (ISO); 3-(3,4-dichlorophenyl)-1,1-dimethylurea		vPvM & PMT	PMT	vP: measured max t1/2.max(d): w=n.d.; s=1 920(vP); sed=232(vP)	UBA: vM EC: M exp log Koc=2.6	(Carc2)(EDC_UnderAssess)(Ecotox_PMT2019)(Ecotox_Envirotox)(Pro.S.P._ED)	> 10	DW: max 2 100 ng/L (D02,D21,D10) GW: max 178 ng/L (G07,G01,G13) RW: max 20 ng/L (R05) BF: - SW: max 1 362 ng/L (S01) WTPE: max 1 426 ng/L (W08,W06,W08,W10)
122-34-9	204-535-2	Simazine		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 159d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM min Dow=1.4 (2a)	(Carc2)(Ecotox_Envirotox)	< 10	DW: max 190 ng/L (D02,D21,D10) GW: max 1 690 ng/L (G07,G01,G13) RW: max 10 ng/L (R05,R03) BF: - SW: max 489 ng/L (S01) WTPE: max 1 990 ng/L (W06,W08)
42399-41-7	-	Diltiazem		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 1 ng/L (D17,D16) GW: max 28 ng/L (G03) RW: max 9 ng/L (R04) BF: - SW: max 425 ng/L (S01,S06,S03) WTPE: max 1 156 ng/L (W12,W08)
144-83-2	205-642-7	Sulfapyridine		Not PMT/vPvM	Not PMT/vPvM	Not P: read across with 200-685-8	UBA: vM EC: vM exp log Koc=0.2	(Pro.S.P._ED)	< 10	DW: max 98 ng/L (D16) GW: max 104 ng/L (G07,G13,G14) RW: max 20 ng/L (R05,R03) BF: - SW: max 829 ng/L (S01,S06,S03,S03) WTPE: max 1 112 ng/L (W12,W09,W04)
34123-59-6	-	Isoproturon		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 20 ng/L (D10,D02) GW: max 100 ng/L (G07,G01,G13) RW: max 20 ng/L (R05) BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 847 ng/L (S01) WTPE: max 270 ng/L (W08)
439-14-5	-	diazepam		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 24 ng/L (D09,D04) GW: max 19 ng/L (G07,G05) RW: max 12 ng/L (R04) BF: - SW: max 152 ng/L (S06,S01,S03) WTPE: max 720 ng/L (W12)
57-41-0	200-328-6	Phenytoin	(p)200-328-6; (s1)211-148-2	vPvM & PMT	vPvM & PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 84d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: vM exp log Koc=1.7	(Rep_BroadCon sensus)	< 10	DW: max 19 ng/L (D04,D02,D09) GW: max 29 ng/L (G15) RW: max 140 ng/L (R04) BF: - SW: max 440 ng/L (S06,S01) WTPE: max 340 ng/L (W12)
882-09-7	-	Clofibric acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 270 ng/L (D09,D17,D16,D10) GW: max 100 ng/L (G02,G04,G05,G14) RW: max 80 ng/L (R05) BF: - SW: max 62 ng/L (S01,S03) WTPE: max 360 ng/L (W04,W04,W07,W08,W10)
66722-44-9	613-980-5	2-Propanol, 1-[4-[[2-(1-methylethoxy)ethoxy]methyl]phenoxy]-3-[(1-methylethyl)amino]-		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 59d	UBA: vM EC: vM exp log Koc=0.1	Cramer Cl.III	< 10	DW: max 17 ng/L (D17) GW: - RW: max 250 ng/L (R04) BF: max 110 ng/L (B07) SW: max 2 900 ng/L (S06) WTPE: max 4 336 ng/L (W12,W08)
126-73-8	204-800-2	Tributyl phosphate		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)	UBA: vM EC: vM exp log Koc=1.8	(Carc2)	> 10	DW: max 180 ng/L (D03) GW: - RW: max 70 ng/L (R05) BF: detected (B04) SW: max 503 ng/L (S01) WTPE: max 1 700 ng/L (W08)
93413-69-5	618-944-2	1-[2-(dimethylamino)-1-(4-methoxyphenyl)ethyl]cyclohexanol		PM	Not PMT/vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 133d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and	UBA: M EC: Not M exp log Koc=3.1	Cramer Cl.III	< 10	DW: max 1 ng/L (D05) GW: - RW: max 59 ng/L (R04) BF: max 5 ng/L (B07)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						consistent indications of P across tested QSARs				SW: max 1 501 ng/L (S06,S01) WTPE: max 1 110 ng/L (W12,W02,W05,W08)
55589-62-3	-	Acesulfame		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 730 ng/L (D18) GW: detected (G08) RW: - BF: max 258 ng/L (B02) SW: max 9 180 ng/L (S01,S02) WTPE: max 2 500 000 ng/L (W08)
73334-07-3	-	Iopromide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 86 ng/L (D02,D17,D21,D09,D10) GW: max 1 600 ng/L (G15) RW: - BF: max 40 ng/L (B07) SW: max 30 000 ng/L (S06,S01,S03) WTPE: max 150 000 ng/L (W08,W03,W04,W08,W12)
27203-92-5	248-319-6	Tramadol		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 106d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM exp log Koc=1.8	Cramer Cl.III	< 10	DW: max 4 ng/L (D05) GW: max 100 ng/L (G13,G02) RW: - BF: max 5 ng/L (B07) SW: max 12 572 ng/L (S06,S01,S04) WTPE: max 97 616 ng/L (W12,W08)
27203-92-5	-	Tramadol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 4 ng/L (D05) GW: max 100 ng/L (G13,G02) RW: - BF: max 5 ng/L (B07) SW: max 12 572 ng/L (S06,S01,S04) WTPE: max 97 616 ng/L (W12,W08)
84057-84-1	-	Lamotrigine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 60 ng/L (D18,D05) GW: max 72 ng/L (G13) RW: - BF: detected (B04) SW: max 677 ng/L (S06,S01) WTPE: max 75 000 ng/L (W12)
127-18-4	204-825-9	Tetrachloroethylene		vPvM & PMT	PMT	vP: No significant biodegradation in 301 C tests. The PBT assessment evaluates the substance to be persistent. Therefore, this substance is assessed to be persistent in water. (Berger et al. 2018)	UBA: vM EC: M exp log Koc=2.1	(Carc2)(SINlist: Perchloroethylene is an endocrine disruptor affecting several body functions	> 10	DW: max 180 000 ng/L (D02,D20,D03) GW: max 10 000 ng/L (G06) RW: max 3 800 ng/L (R05,R06) BF: - SW: max 149 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
								including reproduction, development, neurological function and kidneys. It is categorized as an endocrine disruptor in the EU Commission EDC database.)(Pro.S.P._ED)		
108-88-3	203-625-9	Toluene	(p)203-625-9; ; (p)309-870-9	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: vM EC: vM exp log Koc=1.9	(Rep2)	> 10	DW: max 63 120 ng/L (D02,D08) GW: max 10 000 ng/L (G06) RW: max 181 ng/L (R05) BF: - SW: max 560 ng/L (S01) WTPE: -
1634-04-4	216-653-1	tert-butyl methyl ether		vPvM & PMT	vPvM & PMT	Potential P/vP++: Though definitive P conclusions cannot be found an evaluation of dossier information could not rule out definitely that the P criteria was not met.	UBA: vM EC: vM min Dow=1.0 (2a)	(EDC_UnderAssess)(SINlist: MTBE is an endocrine disruptor with androgen and thyroid activity, affecting several body functions including reproduction and immune function. The substance has been found in biomonitoring studies. It is categorized as an endocrine disruptor in the EU Commission Database.)(Pro.S.P._ED)	> 10	DW: max 57 800 ng/L (D02,D21,D10) GW: max 10 000 ng/L (G06,G05) RW: max 170 ng/L (R05) BF: - SW: max 43 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
67-66-3	200-663-8	Chloroform	(p)200-663-8; (p)212-742-4; (t3)200-262-8	vPvM & PMT	PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 55d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), available QSARs and no biodeg. observed in majority of biodegradation screen tests e.g. OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: vM EC: M exp log Koc=2.0	(Carc2)(Rep2)	> 10	DW: max 34 580 ng/L (D08,D02) GW: max 10 000 ng/L (G05,G06) RW: max 220 ng/L (R05) BF: - SW: max 5 010 ng/L (S01) WTPE: -
71-43-2	200-753-7	Benzene	(p)200-753-7; (p)265-065-1; (p)265-100-0; (p)269-798-8; (p)270-658-3; (p)273-050-6; (p)273-271-8; (p)283-482-7; (p)284-660-7; (p)295-551-9; (p)298-725-2; (p)309-984-9; (p)931-206-7	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: vM EC: vM exp log Koc=1.5	(Carc1ab)(Mut1) (Ecotox_PMT20 19)(Ecotox_Envi rotox)(SINlist: Classified CMR according to Annex VI of Regulation 1272/2008)	> 10	DW: max 25 770 ng/L (D02,D10) GW: max 10 000 ng/L (G06) RW: max 302 ng/L (R05) BF: - SW: max 34 ng/L (S01) WTPE: -
79-01-6	201-167-4	Trichloroethylene		PMT	PMT	P: No significant biodegradation in 301C and D tests. The PBT assessment evaluates the substance to be persistent. Therefore, this substance is assessed to be persistent in water. (Berger et al. 2018)	UBA: vM EC: M exp log Koc=2.1	(SVHC: Carcinogenic (Article 57a))(Carc1ab)( Mut2)(SINlist: Classified CMR according to Annex VI of Regulation 1272/2008)	> 10	DW: max 21 600 ng/L (D02,D20,D10,D18) GW: max 10 000 ng/L (G06) RW: max 15 500 ng/L (R05) BF: - SW: max 91 ng/L (S01) WTPE: -
95-47-6	202-422-2	o-xylene	(p)202-422-2; (s1)215-535-7	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready	UBA: vM EC: M exp log Koc=2.4	Cramer Cl.III	> 10	DW: max 16 470 ng/L (D02) GW: max 10 000 ng/L (G06) RW: max 302 ng/L (R05) BF: - SW: max 48 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						Biodegradability: Manometric Respirometry Test)				
75-34-3	TP of: 200-756-3	1,1-Dichloroethane	(t1)200-756-3	insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 37d	UBA: vM EC: vM exp log Koc=1.2	Cramer Cl.III	< 10	DW: max 6 000 ng/L (D02) GW: max 10 000 ng/L (G06) RW: max 170 ng/L (R05) BF: - SW: max 14 ng/L (S01) WTPE: -
75-35-4	200-864-0	1,1-dichloroethylene		vPvM & PMT	vPvM & PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 36d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), available QSARs and no biodeg. observed in majority of biodegradation screen tests e.g. OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: vM EC: vM exp log Koc=1.4	(Carc2)	> 10	DW: max 100 ng/L (D18) GW: max 10 000 ng/L (G06) RW: max 104 ng/L (R05) BF: - SW: max 13 ng/L (S01) WTPE: -
78-87-5	201-152-2	1,2-dichloropropane	(p)201-152-2; (p)904-304-2	vPvM & PMT	vPvM & PMT	Potential P/vP++: P data for this substance is variable and difficult to conclude; however, its identification in monitoring studies in DW and GW indicates it is persistent enough.	UBA: vM EC: vM exp log Koc=1.7	(Carc1ab)(SINlist: Classified CMR according to Annex VI of Regulation 1272/2008)	> 10	DW: max 1 710 ng/L (D02) GW: max 10 000 ng/L (G06) RW: max 670 ng/L (R05) BF: - SW: max 6 ng/L (S01) WTPE: -
95-50-1	202-425-9	1,2-dichlorobenzene		PMT	Potential PMT/vPvM	vP: measured max t1/2.max(d): w=n.d.; s=191(vP); sed=n.d.	UBA: M EC: Pot. M/vM min Dow=3.3 (2a)	(SINlist: 1,2-dichlorobenzene is very toxic to aquatic species, it is potentially very persistent and very bioaccumulative and has been detected in environmental and human samples. Therefore, ChemSec considers this to be of equivalent level of concern according to the 57f criteria. )	> 10	DW: max 10 ng/L (D02) GW: max 10 000 ng/L (G06) RW: max 100 ng/L (R05) BF: - SW: max 369 ng/L (S01) WTPE: -



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
117-81-7	-	DEHP		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 2 680 ng/L (D07) GW: max 5 661 ng/L (G07) RW: max 860 ng/L (R05) BF: - SW: max 2 250 ng/L (S01) WTPE: -
156-59-2	TP of: 201-167-4 204-825-9	cis-1,2-Dichloroethene	(t2)201-167-4; (t1-2)204-825-9	insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 37d	UBA: vM EC: vM exp log Koc=1.3	Cramer Cl.III	< 10	DW: max 200 ng/L (D18) GW: max 5 000 ng/L (G06) RW: max 3 800 ng/L (R05) BF: - SW: max 73 ng/L (S01) WTPE: -
91-20-3	202-049-5	Naphthalene	(p)202-049-5; (p)265-060-4; (p)265-070-9; (p)265-085-0; (p)265-099-7; (p)265-194-3; (p)265-198-5; (p)265-199-0; (p)283-484-8; (p)285-562-7; (p)292-628-9; (p)295-310-8; (p)309-985-4; (p)310-256-8; (p)918-811-1; (p)919-284-0; (p)922-153-0; (p)926-273-4	Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: Data indicates certain conditions where Naphthalene is persistent, but no definitive conclusion is given based on Nielsen et al. Environ. Sci. Technol., 1995, 30 (1), pp 31–37; further, many natural causes of naphthalene occur	UBA: vM EC: M exp log Koc=2.6	(Carc2)(SINlist: Naphtalene is classified as possible carcinogen (C2) and very toxic to aquatic organisms. It has been reported to have endocrine disrupting effects and it has been detected in the environment and humans.)	> 10	DW: max 900 ng/L (D08,D02) GW: max 5 000 ng/L (G06) RW: max 190 ng/L (R05) BF: - SW: max 144 ng/L (S01) WTPE: -
136-85-6	205-265-8	6-methylbenzotriazole		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 31d	UBA: vM EC: M min Dow=1.5 (2b)	Cramer Cl.III	< 10	DW: max 34 ng/L (D18) GW: max 100 ng/L (G13) RW: max 70 ng/L (R05) BF: - SW: max 4 413 ng/L (S01,S03) WTPE: -
84-66-2	201-550-6	Diethyl phthalate		Not PMT/vPvM	Not PMT/vPvM	Not P: estimated t1/2 (error factor 10) = 10d, and consistency across all tested QSARs	UBA: vM EC: M exp log Koc=2.3	(SINlist: Diethyl phthalate (DEP) is an endocrine disruptor with thyroid and estrogenic activity,	> 10	DW: max 2 470 ng/L (D07,D10) GW: max 1 115 ng/L (G07) RW: max 100 ng/L (R05) BF: - SW: max 142 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
								affecting several body functions and target organs including reproduction, liver and metabolism. The substance has been found in biomonitoring studies and in human urine. It is categorized as an endocrine disruptor in the EU Commission Database.)(Pro. S.P._ED)		
6339-19-1	-	Desphenyl chloridazon		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 540 ng/L (D18) GW: max 1 800 ng/L (G13) RW: max 223 ng/L (R05) BF: - SW: max 2 200 ng/L (S01) WTPE: -
17254-80-7	-	chloridazon-methyl-desphenyl		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 120 ng/L (D18) GW: max 670 ng/L (G13) RW: max 34 ng/L (R05) BF: - SW: max 210 ng/L (S01) WTPE: -
83905-01-5	617-500-5	2R,3R,4R,5R,8R,10R,11R,13S,14R)-11-[(2S,3R,4S,6R)-4-dimethylamino-3-hydroxy-6-methyl-oxan-2-yl]oxy-2-ethyl-3,4,10-trihydroxy-13-[(2S,4R,5S,6S)-5-hydroxy-4-methoxy-4,6-dimethyl-oxan-2-yl]oxy-3,5,6,8,10,12,14-		vPvM & PMT	vPvM & PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 12 351d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: vM min Dow=-4.5 (2c)	(STOTRE_Broad Consensus)	< 10	DW: detected (D16) GW: detected (G14) RW: max 30 ng/L (R05) BF: - SW: max 535 ng/L (S03) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
		hepta methyl-1-oxa-6-azacyclopentadecan-15-one								
486-56-6	-	cotinine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 20 ng/L (D03,D02,D05,D16) GW: max 400 ng/L (G04,G02,G03) RW: max 100 ng/L (R06) BF: - SW: max 477 ng/L (S01,S03) WTPE: -
205939-58-8	-	dimethenamid-ESA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 170 ng/L (D18) GW: max 7 ng/L (G13) RW: max 110 ng/L (R05) BF: - SW: max 13 ng/L (S01) WTPE: -
201668-32-8	-	flufenacet-ESA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 140 ng/L (D18) GW: max 60 ng/L (G13) RW: max 40 ng/L (R05) BF: - SW: max 38 ng/L (S01) WTPE: -
102-06-7	203-002-1	1,3-diphenylguanidine	(p)203-002-1; (s1)246-107-8	vPvM & PMT	PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 194d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: vM EC: M exp log Koc=2.5	(Rep2)	> 10	DW: detected (D22) GW: max 10 ng/L (G08) RW: max 30 ng/L (R05) BF: - SW: max 10 ng/L (S02,S04) WTPE: -
375-95-1	-	PFNA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 5 ng/L (D01,D05,D06) GW: max 10 ng/L (G01) RW: max 14 ng/L (R02) BF: - SW: - WTPE: max 2 735 ng/L (W08,W01)
56773-42-3	260-375-3	Tetraethylammonium heptafluorooctane sulphonate		vPvM & PMT	PMT	vP: long-chain PFAS, Stockholm Convention	UBA: vM EC: M exp log Koc=2.6	(Rep_BroadConsensus)(PBT_BroadConses)	< 10	DW: max 20 ng/L (D10,D18,D21,D02,D01,D05) GW: max 135 ng/L (G01) RW: max 62 ng/L (R02)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										BF: - SW: - WTPE: max 2 101 ng/L (W08,W01)
3871-99-6	-	PFHxS		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 61 ng/L (D18,D05,D01,D06) GW: max 19 ng/L (G01) RW: max 32 ng/L (R02) BF: - SW: - WTPE: max 922 ng/L (W08,W01)
375-73-5	206-793-1	1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonic acid	(s1)249-616-3; (s1)444-440-5; (s1)452-310-4; (s2)432-660-4; (s2)468-770-4; (s2)477-300-7; (s2)478-340-8; (p)206-793-1	vPvM & PMT	vPvM & PMT	vP: short-chain PFAS, on SVHC list - vPvB substance	UBA: vM EC: vM exp log Koc=1.4	(SVHC: Equivalent level of concern having probable serious effects to human health (Article 57(f) - human health)#Equivalent level of concern having probable serious effects to the environment (Article 57(f) - environment))	< 10	DW: max 19 ng/L (D06,D02,D01,D05) GW: max 25 ng/L (G11,G01,G05,G12) RW: max 6 ng/L (R02) BF: - SW: - WTPE: max 26 ng/L (W01)
123-91-1	204-661-8	1,4-dioxane	(p)204-661-8; (s2)944-082-4	PMT	PMT	vP: No degradation in OECD TG 309 (Hofman-Caris and Claßen, 2020), calculated half-life 1,4-dioxane: >10.000 days. No significant biodegradation in 301F test.	UBA: vM EC: vM min Dow=-0.4 (2a)	(Carc2)	> 10	DW: max 770 ng/L (D18,D11) GW: - RW: max 1 000 ng/L (R05) BF: max 1 467 ng/L (B01) SW: max 3 537 ng/L (S01) WTPE: -
111-96-6	203-924-4	Bis(2-methoxyethyl) ether		vPvM & PMT	vPvM & PMT	vP: No degradation in OECD TG 309 (Hofman-Caris and Claßen, 2020). Calculated half-life diglyme: >10.000 days	UBA: vM EC: vM exp log Koc=-1.2	(SVHC: Toxic for reproduction (Article 57c))(Rep1)(SINI list: Classified CMR according to Annex VI of Regulation 1272/2008)	> 10	DW: max 150 ng/L (D10) GW: - RW: max 182 ng/L (R05) BF: max 41 ng/L (B01) SW: max 152 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
78-51-3	201-122-9	Tris(2-butoxyethyl) phosphate		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): EU Method C.4-C (Determination of the "Ready" Biodegradability - Carbon Dioxide Evolution Test) Cited as Directive 84/449/EEC, C.5; EU Method C.4-C (Determination of the "Ready" Biodegradability - Carbon Dioxide Evolution Test) Cited as Directive 84/449/EEC, C.5; EU Method C.4-C (Determination of the "Ready" Biodegradability - Carbon Dioxide Evolution Test) Cited as Directive 92/69/EEC, C.4-C; OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test) 1992; EU Method C.4-C (Determination of the "Ready" Biodegradability - Carbon Dioxide Evolution Test) Cited as Directive 92/69/EEC, C.4-C; OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test) 1992	UBA: vM EC: M exp log Koc=2.5	Cramer Cl.III	> 10	DW: max 350 ng/L (D02) GW: - RW: max 330 ng/L (R05) BF: - SW: max 196 ng/L (S01) WTPE: max 43 000 ng/L (W08)
137862-53-4	-	Valsartan		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 27 ng/L (D17,D21) GW: - RW: max 1 300 ng/L (R04) BF: - SW: max 7 479 ng/L (S06,S01) WTPE: max 28 222 ng/L (W12,W02)
21615-47-4	244-479-6	Ammonium undecafluorohexanoate		vPvM & PMT	vPvM & PMT	vP: short-chain PFAS, PFAS read-across and estimated t1/2 (error factor 10) = 1 048d, weight-of-evidence (this study) based on all used QSARs and no biodeg. observed in majority of biodegradation screen tests for substance/main transformation products	UBA: vM EC: vM exp log Koc=1.8	(read-across PFAS)	> 10	DW: max 25 ng/L (D18,D06,D05,D01) GW: - RW: max 28 ng/L (R02) BF: - SW: max 72 ng/L (S01) WTPE: max 23 800 ng/L (W08,W01,W08)
335-67-1	-	PFOA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 520 ng/L (D10,D02,D01,D05,D06) GW: - RW: max 30 ng/L (R05,R02) BF: - SW: max 134 ng/L (S01) WTPE: max 15 900 ng/L (W08,W01)
114798-26-4	601-329-8	[2-butyl-4-chloro-1-({4-[2-(2H-1,2,3,4-tetrazol-5-yl)phenyl]phenyl}meth		vPvM & PMT	PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 384d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. EU Method C.4-C	UBA: vM EC: M min Dow=1.0 (2b)	(Rep_BroadConsensus)	> 10	DW: max 5 ng/L (D17) GW: - RW: max 620 ng/L (R04) BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
		yl)-1H-imidazol-5-yl]methanol				(Determination of the "Ready" Biodegradability - Carbon Dioxide Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); EU Method C.4-C (Determination of the "Ready" Biodegradability - Carbon Dioxide Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); ISO DIS 9439 (Ultimate Aerobic Biodegradability - Method by Analysis of Released Carbon Dioxide); ISO DIS 9439 (Ultimate Aerobic Biodegradability - Method by Analysis of Released Carbon Dioxide)				SW: max 610 ng/L (S06,S01) WTPE: max 14 100 ng/L (W02,W12)
98105-99-8	-	sarafloxacin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: - RW: max 20 ng/L (R06) BF: - SW: max 3 000 ng/L (S06,S03) WTPE: max 52 ng/L (W12)
375-85-9	-	PFHpA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 10 ng/L (D18) GW: - RW: max 39 ng/L (R02) BF: - SW: max 1 ng/L (S01) WTPE: max 2 962 ng/L (W08,W01)
58-73-1	200-396-7	Diphenhydramine		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 120d, and consistency across all tested QSARs	UBA: vM EC: M exp log Koc=2.5	Cramer Cl.III	< 10	DW: detected (D16) GW: - RW: max 23 ng/L (R06) BF: - SW: max 1 411 ng/L (S06,S01,S03) WTPE: max 704 ng/L (W12,W08)
-	922-246-6	N-[3-acetyl-4-[2-hydroxy-3-(propan-2-ylamino)propoxy]phenyl] butanamide; 2-hydroxybenzoate		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 35d	UBA: vM EC: vM exp log Koc=0.9	Cramer Cl.III	< 10	DW: max 0 ng/L (D17) GW: - RW: max 170 ng/L (R04) BF: - SW: max 643 ng/L (S06) WTPE: max 662 ng/L (W12,W04)
1506-02-1	216-133-4	1-(5,6,7,8-tetrahydro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one	(p)216-133-4; (p)244-240-6	PM	Not PMT/vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 102d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: M EC: Not M exp log Koc=3.1	-	> 10	DW: max 68 ng/L (D03,D02,D13) GW: - RW: max 1 ng/L (R03) BF: - SW: max 110 ng/L (S01,S03)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										WTPE: max 315 ng/L (W10,W03,W04,W10)
88150-42-9	425-820-1	3-ethyl 5-methyl 2-(2-aminoethoxymethyl)-4-(2-chlorophenyl)-1,4-dihydro-6-methyl-3,5-pyridinedicarboxylate		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 41d	UBA: vM EC: vM exp log Koc=1.7	Cramer Cl.III	< 10	DW: max 4 ng/L (D17) GW: - RW: max 3 ng/L (R04) BF: - SW: max 88 ng/L (S01) WTPE: max 79 ng/L (W12)
76-05-1	200-929-3	Trifluoroacetic acid	(s1)220-877-5; (s2)939-998-6; (p)200-929-3	vPvM	vPvM	Potential P/vP++: TFA, estimated t1/2 (error factor 10) = 53d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), available QSARs and no biodeg. observed in majority of biodegradation screen tests e.g. OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: vM EC: vM exp log Koc=-0.8	Cramer Cl.III	> 10	DW: max 20 000 ng/L (D19,D18,D21,D12) GW: max 123 ng/L (G09) RW: - BF: max 20 000 ng/L (B06) SW: max 100 000 ng/L (S05) WTPE: -
104-15-4	203-180-0	Toluene-4-sulphonic acid	(s1)211-522-5; (s1)223-927-4; (s1)237-301-3; (s1)239-421-1; (s1)246-002-7; (s1)420-960-8; (s1)700-195-9; (s2)413-290-2; (s2)419-570-0; (s2)420-680-6; (s2)426-070-6; (s2)435-090-4; (s2)604-261-7; (s2)700-589-0; (s2)927-186-4; (s2)940-053-5; (s2)942-021-6; (p)203-180-0; (s1)230-728-6; (s1)269-537-8; (s1)603-351-3; (s1)605-959-4; (s1)810-688-1; (s2)205-324-8; (s2)217-094-6; (s2)240-702-6; (s2)406-960-0;	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): EPA OPPTS 835.3110 (Ready Biodegradability) 1998; EU Method C.4-A (Determination of the "Ready" Biodegradability - Dissolved Organic Carbon (DOC) Die-Away Test) May 2008; OECD Guideline 301 A (Ready Biodegradability: DOC Die Away Test) July 1992	UBA: vM EC: vM min Dow=-1.0 (2a)	Cramer Cl.III	> 10	DW: max 50 ng/L (D18) GW: max 1 000 ng/L (G08) RW: - BF: detected (B04) SW: max 1 000 ng/L (S02) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
			(s2)421-130-8; (s2)440-560-7; (s2)500-281-4; (s2)605-383-3; (s2)606-457-8; (s2)606-458-3; (s2)614-977-1; (s2)616-190-9; (s2)619-811-1; (s2)801-606-5; (s2)929-151-9							
172960-62-2	-	Metazachlor-ESA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 170 ng/L (D18) GW: max 89 ng/L (G13) RW: - BF: max 686 ng/L (B02) SW: max 520 ng/L (S01) WTPE: -
1610-18-0	-	Prometon (H)		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 96 ng/L (D02) GW: max 6 ng/L (G13) RW: - BF: max 50 ng/L (B03) SW: max 133 ng/L (S01) WTPE: -
70-55-3	200-741-1	Toluene-4-sulphonamide	(p)200-741-1; (s3)215-578-1	Not PMT/vPvM	Not PMT/vPvM	Not P: Ambiguous mostly Not P: OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: vM EC: vM exp log Koc=0.3	Cramer Cl.III	> 10	DW: detected (D14) GW: detected (G08) RW: - BF: detected (B04) SW: detected (S02) WTPE: -
154-21-2	-	Lincomycin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 1 413 000 ng/L (D17,D16) GW: max 1 900 ng/L (G15,G03,G04) RW: - BF: - SW: max 2 600 ng/L (S06,S01,S03) WTPE: max 43 909 000 ng/L (W12,W08,W07)
54-21-7	200-198-0	Sodium salicylate	(s1)200-198-0; ; (s1)209-421-6; (s1)254-228-	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: vM EC: vM exp log Koc=0.3	-	> 10	DW: max 68 ng/L (D17) GW: max 2 300 ng/L (G15,G04,G05) RW: -



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
			2; (s2)922-246-6; (t1)201-961-0; (t1-1)204-354-9; (p)200-712-3; (p)931-371-5; (p)931-472-4							BF: - SW: max 5 155 000 ng/L (S06,S01,S03) WTPE: max 177 000 ng/L (W12,W05)
470-90-6	-	Chlorfenvinphos		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D02) GW: max 2 500 ng/L (G07) RW: - BF: - SW: max 3 068 000 ng/L (S06,S01) WTPE: max 300 ng/L (W12)
5786-21-0	-	Clozapine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 19 ng/L (D17) GW: max 1 ng/L (G15) RW: - BF: - SW: max 660 ng/L (S06) WTPE: max 1 084 000 ng/L (W12)
3380-34-5	222-182-2	Triclosan		vPvM & PMT	PMT	Potential P/vP++: The P conclusion of triclosan remains controversial, with P assessment still under development. It is observed in monitoring studies (UBA, 2019), indicating it may be sufficient persistent to reach drinking water.	UBA: vM EC: M exp log Koc=2.4	(PBT_UnderAssess)(EDC_UnderAssess)(Ecotox_PMT2019)(Ecotox_Envirotox)(SINlist: Triclosan is very toxic to aquatic life and endocrine disrupting effects have been reported. It is potentially bioaccumulative and has been widely found in both humans and the environment.)(Pro.S.P._ED)	< 10	DW: max 734 ng/L (D09,D17,D04,D07) GW: max 2 110 ng/L (G04,G01,G13,G15) RW: - BF: - SW: max 1 023 ng/L (S06,S01,S03) WTPE: max 378 000 ng/L (W12,W07,W10,W11)
79-57-2	-	Oxytetracycline		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 559 ng/L (D16) GW: max 40 ng/L (G15,G14) RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 361 107 ng/L (S06,S01,S03) WTPE: max 1 207 ng/L (W12)
51-28-5	200-087-7	2,4-dinitrophenol	(p)200-087-7; (t1-2)201-865-9	vPvM & PMT	vPvM & PMT	Potential P/vP++: this is not persistent in soil, but data in some REACH dossiers suggests the vP criteria in fresh water is met. Further, evidence of persistency is its discovery in monitoring studies (UBA, 2019), consistent indications of P across all tested QSARs, also prioritized by Nödler et al. (2019) as resistant to drinking water treatment.	UBA: vM EC: vM exp log Koc=1.1	(DNEL)(Pro.S.P._ ED)	> 10	DW: max 333 000 ng/L (D02) GW: max 122 ng/L (G01) RW: - BF: - SW: max 845 ng/L (S01) WTPE: max 474 ng/L (W08)
56-75-7	200-287-4	Chloramphenicol		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 146d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM exp log Koc=0.3	Cramer Cl.III	< 10	DW: max 1 ng/L (D17) GW: detected (G14) RW: - BF: - SW: max 260 000 ng/L (S06,S01,S03) WTPE: max 1 050 ng/L (W12)
50-78-2	200-064-1	O-acetylsalicylic acid		Not PMT/vPvM	Not PMT/vPvM	Not P: estimated t1/2 (error factor 10) = 11d, and consistency across all tested QSARs	UBA: vM EC: vM exp log Koc=0.7	-	> 10	DW: max 120 ng/L (D10) GW: max 100 ng/L (G02) RW: - BF: - SW: max 4 150 ng/L (S06) WTPE: max 193 000 ng/L (W12)
1115-70-4	214-230-6	Metformin hydrochloride		vPvM	vPvM	P: Metformin can be considered persistent in water according to PBT criteria (water DT50 = 43.3d > 40d) (report from the EMA/86928/2018 Committee for Medicinal Products for Human Use (CHMP))" and majority of biodegradation screen tests, e.g. EPA OTS 796.3260 (Ready Biodegradability: Modified Sturm Test); EPA OTS 796.3260 (Ready Biodegradability: Modified Sturm Test)	UBA: vM EC: vM min Dow=-3.5 (2c)	Suspected endocrine disruptor (e.g. Niemuth et al. Aquatic Toxicology (2018), 195, 33-40)	> 10	DW: max 735 ng/L (D17,D18) GW: max 100 ng/L (G02) RW: - BF: - SW: max 2 636 ng/L (S06,S01) WTPE: max 92 000 ng/L (W12)
54910-89-3	-	fluoxetine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 9 ng/L (D04,D17,D16,D02) GW: max 3 ng/L (G15) RW: - BF: - SW: max 43 000 ng/L (S06,S01,S03) WTPE: max 1 972 ng/L (W12,W10,W08)
1672-58-8	-	FAA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 30 ng/L (D18) GW: max 3 ng/L (G13) RW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										BF: - SW: max 1 310 ng/L (S01) WTPE: max 27 444 ng/L (W10)
60-54-8	-	Tetracycline		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 15 ng/L (D17,D16) GW: max 12 ng/L (G15,G14) RW: - BF: - SW: max 25 538 ng/L (S06,S01,S03) WTPE: max 15 000 ng/L (W12,W04,W02,W09)
50-28-2	200-023-8	Estradiol		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)	UBA: M EC: Pot. M/vM min Dow=2.7 (2a)	(Rep_BroadConsensus)(Ecotox_PMT2019)(Pro.S.P._ED)	< 10	DW: max 6 ng/L (D17,D02) GW: max 120 ng/L (G04,G15) RW: - BF: - SW: max 13 450 ng/L (S06,S01,S03) WTPE: max 25 200 ng/L (W12)
134523-00-5	-	Atorvastatin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 0 ng/L (D17) GW: max 1 ng/L (G15) RW: - BF: - SW: max 128 ng/L (S06,S01) WTPE: max 23 600 ng/L (W05,W08)
52169-36-5	610-790-4	5-chloro-N-[2-[4-(cyclohexylcarbonyl)phenyl]ethyl]-2-methoxybenzamide; potassium		Potential PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 254d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: M EC: Not M exp log Koc=3.4	Cramer Cl.III	< 10	DW: max 3 ng/L (D17) GW: max 28 ng/L (G15) RW: - BF: - SW: max 150 ng/L (S06,S01) WTPE: max 15 900 ng/L (W12,W08,W12)
76-57-3	-	Codeine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 30 ng/L (D09,D02) GW: max 348 ng/L (G07) RW: - BF: - SW: max 3 141 ng/L (S06,S01) WTPE: max 15 593 ng/L (W12,W04,W08,W10)
56038-13-2	-	Sucralose		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 2 400 ng/L (D05) GW: max 2 400 ng/L (G10) RW: - BF: - SW: max 4 510 ng/L (S01) WTPE: max 12 900 ng/L (W08)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
60142-95-2	262-075-8	1-(aminomethyl)cyclohexaneacetic acid hydrochloride		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 17d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)	UBA: vM EC: vM min Dow=-1.8 (2c)	Cramer Cl.III	< 10	DW: max 80 ng/L (D18) GW: max 10 000 ng/L (G02,G13) RW: - BF: - SW: max 1 887 ng/L (S06,S01) WTPE: max 4 261 ng/L (W12)
15972-60-8	-	Alachlor		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 17 ng/L (D02) GW: max 9 950 ng/L (G07,G01) RW: - BF: - SW: max 8 ng/L (S01) WTPE: max 3 ng/L (W06)
2008-39-1	217-915-8	Dimethylammonium 2,4-dichlorophenoxyacetate		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 36d	UBA: vM EC: vM min Dow=-1.1 (2b)	Cramer Cl.III	< 10	DW: max 110 ng/L (D10) GW: max 12 ng/L (G01) RW: - BF: - SW: max 6 440 ng/L (S01) WTPE: max 442 ng/L (W06,W08,W06)
81103-11-9	-	Clarithromycin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 12 ng/L (D17,D16) GW: max 1 ng/L (G15,G05,G14) RW: - BF: - SW: max 5 705 ng/L (S06,S01,S03) WTPE: max 5 609 ng/L (W12,W09,W02,W04)
57-83-0	200-350-6	Progesterone		Potential PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 133d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: M EC: Not M exp log Koc=3.0	(Rep_BroadConsensus)(Pro.S.P._ED)	< 10	DW: max 11 ng/L (D17,D04,D02) GW: max 100 ng/L (G02) RW: - BF: - SW: max 4 200 ng/L (S06,S01) WTPE: max 370 ng/L (W12)
443-48-1	207-136-1	Metronidazole		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 43d	UBA: vM EC: vM exp log Koc=-0.5	(Carc_BroadConsensus)	< 10	DW: max 19 ng/L (D17) GW: max 100 ng/L (G02,G05) RW: - BF: - SW: max 4 020 ng/L (S06,S03) WTPE: max 2 176 ng/L (W12,W02,W10)
122-11-2	-	Sulfadimethoxine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: max 130 ng/L (G15,G07)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										RW: - BF: - SW: max 3 956 ng/L (S06,S01,S03) WTPE: max 1 500 ng/L (W12)
1401-69-0	-	Tylosin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 31 ng/L (D17,D02,D16) GW: max 25 ng/L (G15) RW: - BF: - SW: max 542 ng/L (S06,S03) WTPE: max 3 400 ng/L (W12)
330-55-2	-	Linuron		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 6 ng/L (D04) GW: max 1 010 ng/L (G07,G01,G05) RW: - BF: - SW: max 270 ng/L (S01) WTPE: max 3 265 ng/L (W08)
15165-67-0	403-980-1	R-(+)-2-(2,4-dichlorophenoxy)propionic acid	(s1)413-340-3; (s1)413-580-9; (p)403-980-1	insufficient data	insufficient data	no conclusion/data: no data	UBA: vM EC: vM min Dow=-0.5 (2b)	-	< 10	DW: detected (D10) GW: max 3 199 ng/L (G01,G13) RW: - BF: - SW: max 23 ng/L (S01) WTPE: max 186 ng/L (W08)
389-08-2	-	Nalidixic acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: detected (G14) RW: - BF: - SW: max 750 ng/L (S06,S03) WTPE: max 2 730 ng/L (W12)
1511-16-6	689-044-5	1-Butanone,4-[4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl]-1-(4-fluorophenyl)-,hydrochloride		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 1 548d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: M exp log Koc=2.6	Cramer Cl.III	< 10	DW: max 1 ng/L (D17) GW: max 0 ng/L (G15) RW: - BF: - SW: max 40 ng/L (S06) WTPE: max 2 692 ng/L (W08,W12)
15676-16-1	239-753-7	Sulpiride	(p)239-753-7; (s1)245-826-4	Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 110d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM exp log Koc=0.1	Cramer Cl.III	< 10	DW: max 2 ng/L (D17,D16) GW: max 10 ng/L (G13,G14) RW: - BF: - SW: max 2 100 ng/L (S06,S03) WTPE: max 471 ng/L (W12)
139481-59-7	604-138-8	2-ethoxy-1-[[2'-(1H-tetrazol-5-yl)]biphenyl-		vPvM	vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 124d,	UBA: vM EC: vM	Cramer Cl.III	< 10	DW: max 20 ng/L (D18) GW: max 78 ng/L (G13)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
		4-yl]methyl]-1H-benzimidazole-7-carboxylic acid				weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	min Dow=-0.9 (2b)			RW: - BF: - SW: max 1 100 ng/L (S06) WTPE: max 1 985 ng/L (W12)
6190-65-4	TP of: 217-617-8	Deethylatrazine		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 143d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM exp log Koc=0.6	Cramer Cl.III	< 10	DW: max 320 ng/L (D02) GW: max 1 980 ng/L (G07,G01,G13) RW: - BF: - SW: max 851 ng/L (S01,S01) WTPE: max 155 ng/L (W08,W06)
519-09-5	-	Benzoylcegonine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 53 ng/L (D17) GW: max 20 ng/L (G07) RW: - BF: - SW: max 316 ng/L (S06,S01) WTPE: max 1 446 ng/L (W12)
57-53-4	-	meprobamate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 42 ng/L (D04,D17,D02,D09) GW: max 73 ng/L (G15) RW: - BF: - SW: max 406 ng/L (S01,S06) WTPE: max 1 270 ng/L (W12)
106266-06-2	-	risperidone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 3 ng/L (D04) GW: max 1 ng/L (G15) RW: - BF: - SW: max 50 ng/L (S06,S01) WTPE: max 858 ng/L (W08,W12)
1007-28-9	TP of: 204-535-2 217-617-8	Simazine-metabolite	(t2)204-535-2; (t2)217-617-8	Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 142d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: M min Dow=0.3 (2c)	Cramer Cl.III	< 10	DW: max 75 ng/L (D02) GW: max 790 ng/L (G07) RW: - BF: - SW: max 430 ng/L (S01) WTPE: max 87 ng/L (W06)
51235-04-2	-	Hexazinone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D02) GW: max 589 ng/L (G01,G05,G13) RW: - BF: - SW: max 47 ng/L (S01) WTPE: max 420 ng/L (W08)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
3575-80-2	609-173-2	1-(4-fluorophenyl)-4-(4-methylpiperidin-1-yl)butan-1-one		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 371d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: M min Dow=-0.3 (2c)	Cramer Cl.III	< 10	DW: max 1 ng/L (D17) GW: max 0 ng/L (G15) RW: - BF: - SW: max 150 ng/L (S06) WTPE: max 390 ng/L (W12)
42017-89-0	255-626-9	2-[4-(4-chlorobenzoyl)phenoxy]-2-methylpropionic acid		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 49d	UBA: vM EC: M min Dow=0.8 (2b)	Cramer Cl.III	< 10	DW: max 210 ng/L (D02) GW: max 100 ng/L (G02) RW: - BF: - SW: max 1 ng/L (S01) WTPE: max 380 ng/L (W04)
54-11-5	-	Nicotine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 0 ng/L (D05) GW: max 144 ng/L (G07) RW: - BF: - SW: max 378 ng/L (S01,S04) WTPE: max 158 ng/L (W10)
63-05-8	200-554-5	Androst-4-ene-3,17-dione	(p)200-554-5; (t1)200-370-5	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)	UBA: M EC: Pot. M/vM min Dow=2.7 (2a)	(Rep_BroadConsensus)(Pro.S.P._ED)	> 10	DW: detected (D02) GW: max 100 ng/L (G14) RW: - BF: - SW: max 110 ng/L (S06,S01) WTPE: max 181 ng/L (W12)
80-35-3	-	Sulfamethoxypyridazine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: max 69 ng/L (G07) RW: - BF: - SW: max 165 ng/L (S06,S03) WTPE: max 47 ng/L (W12)
14698-29-4	-	Oxolinic acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D02) GW: max 100 ng/L (G02) RW: - BF: - SW: max 106 ng/L (S06,S03) WTPE: max 55 ng/L (W12)
1893-33-0	606-172-9	(1,4'-Bipiperidine)-4'-carboxamide, 1'-(3-(p-fluorobenzoyl)propyl)-		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 1 434d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM min Dow=-3.8 (2c)	Cramer Cl.III	< 10	DW: max 2 ng/L (D17) GW: max 0 ng/L (G15) RW: - BF: - SW: max 9 ng/L (S06) WTPE: max 75 ng/L (W12)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
98079-51-7	619-317-6	1-ethyl-6,8-difluoro-7-(3-methylpiperazin-1-yl)-4-oxo-1,4-dihydroquinoline-3-carboxylic acid		insufficient data	insufficient data	no conclusion/data: no data	UBA: vM EC: vM exp log Koc=-1.5	-	< 10	DW: detected (D16) GW: detected (G14) RW: - BF: - SW: max 13 ng/L (S06,S03) WTPE: max 70 ng/L (W12)
127-69-5	-	Sulfisoxazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: max 17 ng/L (G07) RW: - BF: - SW: max 61 ng/L (S06,S03) WTPE: max 34 ng/L (W09,W12)
983-42-6	-	Benperidol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 1 ng/L (D17) GW: max 0 ng/L (G15) RW: - BF: - SW: max 3 ng/L (S06) WTPE: max 53 ng/L (W12)
515-64-0	-	Sulfisomidine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: max 0 ng/L (G15) RW: - BF: - SW: max 40 ng/L (S06,S03) WTPE: max 7 ng/L (W12)
78649-41-9	-	lomeprol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 10 ng/L (D10,D02) GW: - RW: - BF: max 160 ng/L (B07,B02) SW: max 1 258 ng/L (S06) WTPE: max 10 534 ng/L (W08,W04,W12)
10605-21-7	234-232-0	Carbendazim		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 71d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 302 B (Inherent biodegradability: Zahn-Wellens/EMPA Test)	UBA: vM EC: vM exp log Koc=1.0	(Mut1)(Rep1)	< 10	DW: - GW: max 4 ng/L (G13) RW: max 28 ng/L (R05) BF: detected (B04) SW: max 1 923 ng/L (S01,S03) WTPE: -
1698-60-8	-	Pyrazon		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 8 ng/L (G13) RW: max 38 ng/L (R05) BF: detected (B04)



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 670 ng/L (S01) WTPE: -
611-59-6	TP of: 200-362-1	Paraxanthine	(t1)200-362-1	insufficient data	insufficient data	no conclusion/data: no data	UBA: vM EC: vM exp log Koc=-1.0	-	< 10	DW: - GW: max 57 ng/L (G03) RW: max 300 ng/L (R06) BF: max 6 ng/L (B03) SW: - WTPE: max 1 796 ng/L (W10)
333-41-5	-	Diazinon		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 300 ng/L (G07,G01) RW: max 510 ng/L (R06) BF: - SW: max 580 000 ng/L (S06,S01) WTPE: max 4 160 ng/L (W06,W08,W12)
18559-94-9	242-424-0	Salbutamol		vPvM & PMT	vPvM & PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 19d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)	UBA: vM EC: vM exp log Koc=-0.9	(Pro.S.P._ED)	> 10	DW: - GW: max 9 ng/L (G07) RW: max 86 ng/L (R04) BF: - SW: max 480 ng/L (S06,S01) WTPE: max 8 100 ng/L (W12)
60-51-5	-	Dimethoate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 2 277 ng/L (G07) RW: max 1 ng/L (R03) BF: - SW: max 236 ng/L (S01) WTPE: max 188 ng/L (W06)
115-86-6	204-112-2	Triphenyl phosphate		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): EPA OTS 796.3260 (Ready Biodegradability: Modified Sturm Test); EPA OTS 796.3260 (Ready Biodegradability: Modified Sturm Test); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: M EC: Not M exp log Koc=3.5	(EDC_UnderAssess)(Ecotox_PMT2019)(SINlist: This substance has endocrine disrupting properties. Exposure through dust in humans has been associated with decreased sperm concentrations. Studies in fish show altered	> 10	DW: - GW: - RW: max 170 ng/L (R05) BF: max 120 ng/L (B03) SW: max 61 ng/L (S01) WTPE: max 610 ng/L (W08)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
								levels of estradiol and testosterone, increased levels of vitellogenin and impaired reproduction.)		
107-06-2	203-458-1	1,2-dichloroethane		PMT	PMT	P: Due to lack of other information the substance was assessed by PBT assessment in water. Therefore, this substance is assessed to be persistent in water. (Berger et al. 2018)	UBA: vM EC: vM min Dow=1.5 (2a)	(SVHC: Carcinogenic (Article 57a))(Carc1ab)(SINlist: Classified CMR according to Annex VI of Regulation 1272/2008)	> 10	DW: max 81 900 ng/L (D02) GW: max 5 000 ng/L (G06) RW: max 672 ng/L (R05) BF: - SW: - WTPE: -
100-41-4	202-849-4	Ethylbenzene	(p)202-849-4; ; (p)271-635-0; (p)700-371-5; (p)905-562-9; (p)905-588-0	Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 27d, and consistency across all tested QSARs	UBA: M EC: Pot. M/vM min Dow=3.1 (2a)	(Carc_MinorOpinionMut_MinorOpinion)	> 10	DW: detected (D02) GW: max 10 000 ng/L (G06) RW: max 302 ng/L (R05) BF: - SW: - WTPE: -
75-01-4	200-831-0	Chloroethylene	(p)200-831-0; (t2-1)201-167-4; (t3-1)201-167-4	vPvM & PMT	vPvM & PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 24d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: vM exp log Koc=0.9	(Carc1ab)(SINlist: Classified CMR according to Annex VI of Regulation 1272/2008)	> 10	DW: max 250 ng/L (D02) GW: max 10 000 ng/L (G06) RW: max 500 ng/L (R05) BF: - SW: - WTPE: -
98-82-8	202-704-5	Cumene	(p)202-704-5; (s1)407-840-0	Potential PMT/vPvM	Not PMT/vPvM	Pot. P/vP: Initial evidence suggests not-P under aerobic conditions, observed in monitoring studies, could be due to extensive emissions.	UBA: Pot. M/vM EC: Not M min Dow=3.6 (2a)	-	> 10	DW: max 110 ng/L (D02) GW: max 5 000 ng/L (G06) RW: max 140 ng/L (R05) BF: - SW: - WTPE: -
36507-30-9	-	10,11-Dihydro-10,11-Epoxy carbamazepine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 128 ng/L (D17) GW: max 7 ng/L (G13) RW: max 71 ng/L (R04) BF: - SW: - WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
100-42-5	202-851-5	Styrene	(p)202-851-5; (s2)618-465-9; (t2)202-849-4; (t2)271-138-9; (t2)271-635-0; (t2)700-371-5; (t2)905-562-9; (t2)905-588-0	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: vM EC: vM min Dow=0.4 (2a)	(Rep2)(Ecotox_P MT2019) (DNEL)(SINlist: Styrene shows specific organ toxicity and is a suspected reprotoxic chemical. It is categorized as an endocrine disruptor in the EU Commission Database.)(Pro. S.P. ED)	> 10	DW: max 46 400 ng/L (D02) GW: - RW: max 60 ng/L (R05) BF: - SW: max 25 ng/L (S01) WTPE: -
1071-83-6	-	glyphosate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 460 ng/L (D10,D21) GW: - RW: max 53 ng/L (R05) BF: - SW: max 7 900 ng/L (S01) WTPE: -
791-28-6	212-338-8	Triphenylphosphine oxide		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 106d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), available QSARs and no biodeg. observed in majority of biodegradation screen tests e.g. OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: vM EC: vM exp log Koc=1.4	Cramer Cl.III	< 10	DW: max 130 ng/L (D10) GW: - RW: max 127 ng/L (R05) BF: - SW: max 2 021 ng/L (S01) WTPE: -
108-60-1	-	Bis(2-chloroisopropyl)ether (BCIPE)2		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 1 900 ng/L (D10) GW: - RW: max 100 ng/L (R05) BF: - SW: max 393 ng/L (S01) WTPE: -
77-93-0	201-070-7	Triethyl citrate		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test); EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric	UBA: vM EC: vM exp log Koc=0.1	Cramer Cl.III	> 10	DW: max 82 ng/L (D03,D02) GW: - RW: max 560 ng/L (R06) BF: - SW: max 1 835 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)				
3622-84-2	222-823-6	N-butylbenzenesulphona mide		vPvM	PM	vP: measured max t1/2.max(d): w=985(vP); s=n.d.; sed=n.d.	UBA: vM EC: M min Dow=2.0 (2a)	Cramer Cl.III	> 10	DW: max 50 ng/L (D10) GW: - RW: max 937 ng/L (R05) BF: - SW: max 888 ng/L (S01) WTPE: -
120-82-1	204-428-0	1,2,4-trichlorobenzene		PMT	Not PMT/vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 117d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), available QSARs and no biodeg. observed in majority of biodegradation screen tests e.g. OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: M EC: Not M exp log Koc=3.3	(SINlist: Substance is concluded to be PBT by European Chemicals Bureau PBT Working Group.)(Pro.S.P._ED)	< 10	DW: max 920 ng/L (D02) GW: - RW: max 20 ng/L (R05) BF: - SW: max 4 ng/L (S01) WTPE: -
75-09-2	200-838-9	dichloromethane; methylene chloride	(p)200-838-9; ; (t1)212-742-4; (t3-1)200-262-8	vPvM & PMT	vPvM & PMT	vP: measured max t1/2.max(d): w=n.d.; s=191(vP); sed=n.d.	UBA: vM EC: vM min Dow=1.3 (2a)	(Carc2)(EDC_UnderAssess)	> 10	DW: max 531 ng/L (D02) GW: - RW: max 270 ng/L (R05) BF: - SW: max 285 ng/L (S01) WTPE: -
87674-68-8	-	Dimethenamid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 67 ng/L (D02) GW: - RW: max 102 ng/L (R05) BF: - SW: max 14 ng/L (S01) WTPE: -
541-73-1	208-792-1	1,3-dichlorobenzene		vPvM & PMT	PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 131d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: vM EC: M exp log Koc=2.4	(Pro.S.P._ED)	> 10	DW: max 100 ng/L (D02) GW: - RW: max 10 ng/L (R05) BF: - SW: max 5 ng/L (S01) WTPE: -
67035-22-7	-	Dehydronifedipine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 4 ng/L (D17) GW: - RW: max 19 ng/L (R06)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										BF: - SW: max 6 ng/L (S01) WTPE: -
335-76-2	-	PFDA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 1 ng/L (D01,D05,D06) GW: - RW: max 1 ng/L (R02) BF: - SW: - WTPE: max 1 687 ng/L (W08,W01)
2706-90-3	-	PFPeA - Perfluorovaleric acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 6 ng/L (D06,D01) GW: - RW: max 40 ng/L (R02) BF: - SW: - WTPE: max 41 ng/L (W01)
75-27-4	-	Bromodichloromethane		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 27 450 ng/L (D08,D02) GW: max 10 000 ng/L (G07) RW: - BF: - SW: max 2 576 ng/L (S01) WTPE: -
124-48-1	-	Dibromochloromethane		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 17 930 ng/L (D08,D18,D02) GW: max 10 000 ng/L (G06,G05) RW: - BF: - SW: max 520 ng/L (S01) WTPE: -
75-25-2	200-854-6	Bromoform		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 72d	UBA: vM EC: M min Dow=2.2 (2a)	Cramer Cl.III	> 10	DW: max 4 190 ng/L (D08,D02) GW: max 10 000 ng/L (G06,G05) RW: - BF: - SW: max 140 ng/L (S01) WTPE: -
2212-67-1	-	Molinat		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 5 700 ng/L (D02) GW: max 5 ng/L (G07) RW: - BF: - SW: max 549 ng/L (S01) WTPE: -
171118-09-5	-	Metolachlor ESA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 4 000 ng/L (D02) GW: max 970 ng/L (G13) RW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										BF: - SW: max 310 ng/L (S01) WTPE: -
461-58-5	207-312-8	Cyanoguanidine		vPvM	vPvM	vP: No significant biodegradation in 301E tests. The REACH PBT assessment evaluates the substance to be very persistent. Therefore, this substance is assessed to be persistent in water. (Berger et al. 2018)	UBA: vM EC: vM exp log Koc=-1.1	Cramer Cl.III	> 10	DW: detected (D22) GW: max 1 000 ng/L (G08) RW: - BF: - SW: max 3 000 ng/L (S02) WTPE: -
114-07-8	204-040-1	Erythromycin	(p)204-040-1; (s1)231-723-1	vPvM & PMT	vPvM & PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 6 161d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: vM min Dow=-0.9 (2c)	(Ecotox_Envirotox)	< 10	DW: max 9 ng/L (D16) GW: max 378 ng/L (G14) RW: - BF: - SW: max 2 834 ng/L (S03) WTPE: -
108-78-1	203-615-4	Melamine	(p)203-615-4; (s1)236-860-0; (s1)239-590-1; (s1)253-575-7; (s1)255-449-7; (s1)403-290-0; (s2)605-959-4; (s2)939-379-0	vPvM & PMT	vPvM & PMT	vP: No degradation in OECD TG 309 (Hofman-Caris and Claßen, 2020). Calculated half-life melamine in water: >10.000 days; measured max t1/2.max(d) in soil = 913 days (eChemPortal database)	UBA: vM EC: vM exp log Koc=1.1	STOTE RE (nephrotoxic in combination with cyanuric acid)T	> 10	DW: max 2 000 ng/L (D15) GW: max 770 ng/L (G13,G08) RW: - BF: - SW: max 1 000 ng/L (S02,S01,S04) WTPE: -
60-54-8	200-481-9	Tetracycline	(p)200-481-9; (s1)200-593-8	Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 163d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM min Dow=-5.7 (2b)	Cramer Cl.III	< 10	DW: max 32 ng/L (D16) GW: max 170 ng/L (G14) RW: - BF: - SW: max 1 455 ng/L (S03) WTPE: -
187022-11-3	-	Acetochlor ESA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 1 100 ng/L (D02) GW: max 47 ng/L (G13) RW: - BF: - SW: max 4 ng/L (S01) WTPE: -
1493-13-6	216-087-5	Trifluoromethanesulphonic acid	(s1)415-540-6; (s2)434-160-1; (s2)609-186-3; (s2)680-002-1; (p)216-087-5; (s1)251-528-5; (s2)432-340-4	vPvM	vPvM	Potential P/vP++: short-chain PFAS, estimated t1/2 (error factor 10) = 67d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. EU Method C.4-E (Determination of the "Ready" Biodegradability - Closed Bottle Test); EU Method C.4-E (Determination of the "Ready"	UBA: vM EC: vM exp log Koc=-0.2	Cramer Cl.III	> 10	DW: max 1 000 ng/L (D13) GW: detected (G08) RW: - BF: - SW: detected (S02) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						Biodegradability - Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)				
108-80-5	203-618-0	Cyanuric acid	(s1)221-255-6; ; (p)203-618-0; (s1)246-279-4; (p)931-274-8; (s2)253-575-7	vPvM & PMT	vPvM & PMT	vp: vP Assessment for EC 253-575-7, consistent indicators of P, monitored extensively in the environment (Schulze et al. 2019) and in this study in bank filtrate, raw water and drinking water	UBA: vM EC: vM exp log Koc=1.7	STOTE RE (nephrotoxic in combination with melamine)T	> 10	DW: max 120 ng/L (D15,D22) GW: detected (G08-SW?) RW: - BF: - SW: max 480 ng/L (S04,S02) WTPE: -
54-11-5	200-193-3	Nicotine	(p)200-193-3; (s1)200-606-7; (s1)200-607-2	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): EU Method C.4-C (Determination of the "Ready" Biodegradability - Carbon Dioxide Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); EU Method C.4-C (Determination of the "Ready" Biodegradability - Carbon Dioxide Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)	UBA: M EC: Not M exp log Koc=3.6	Cramer Cl.III	> 10	DW: max 0 ng/L (D05) GW: max 144 ng/L (G07) RW: - BF: - SW: max 378 ng/L (S01,S04) WTPE: -
21312-10-7	-	N4-Acetylsulfamethoxazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: max 4 ng/L (G15,G14) RW: - BF: - SW: max 180 ng/L (S01,S03) WTPE: -
67129-08-2	-	Metazachlor		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D02) GW: max 26 ng/L (G13,G05) RW: - BF: - SW: max 178 ng/L (S01) WTPE: -
1231244-60-2	-	metazachloric acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 130 ng/L (D18) GW: max 120 ng/L (G13) RW: - BF: - SW: max 170 ng/L (S01) WTPE: -
97-39-2	202-577-6	1,3-di-o-tolylguanidine	(p)202-577-6; (s2)277-086-3	vPvM	vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 236d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation	UBA: vM EC: vM min Dow=-4.0 (2a)	(Carc_MinorOpinion)Cramer Cl.III	> 10	DW: detected (D22) GW: max 150 ng/L (G08) RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						screen tests, e.g. OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))				SW: max 150 ng/L (S02,S04) WTPE: -
30125-63-4	-	Desethylterbutylazin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D02) GW: max 38 ng/L (G13) RW: - BF: - SW: max 132 ng/L (S01) WTPE: -
551-92-8	-	Dimetridazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 15 ng/L (D17) GW: max 100 ng/L (G02) RW: - BF: - SW: max 28 ng/L (S06,S03) WTPE: -
66753-07-9	-	terbutylazine-2-hydroxy		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 26 ng/L (D18) GW: max 40 ng/L (G13) RW: - BF: - SW: max 45 ng/L (S01) WTPE: -
139-40-2	205-359-9	Propazine		vPvM & PMT	vPvM & PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 383d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: vM exp log Koc=1.7	(Carc2)(Ecotox_Envirotox)(Pro.S.P._ED)	< 10	DW: detected (D02) GW: max 25 ng/L (G01) RW: - BF: - SW: max 41 ng/L (S01) WTPE: -
98106-17-3	-	Diflofloxacin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 8 ng/L (D16) GW: max 22 ng/L (G14) RW: - BF: - SW: max 21 ng/L (S06,S03) WTPE: -
21725-46-2	-	Cyanazine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 12 ng/L (D02) GW: max 4 ng/L (G07) RW: - BF: - SW: max 1 ng/L (S01) WTPE: -
105-60-2	203-313-2	ε-caprolactam	(s1)241-158-2; (p)203-313-2	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 C	UBA: vM EC: vM	Cramer Cl.III	> 10	DW: detected (D22) GW: detected (G08)



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						(Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	min Dow=0.1 (2a)			RW: - BF: - SW: detected (S02) WTPE: -
121-57-3	204-482-5	Sulphanilic acid	(s1)208-208-5; (s1)249-942-6; (t1)200-563-4; (p)204-482-5; (s1)290-690-1	Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 119d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: vM min Dow=-2.3 (2a)	(Pro.S.P._ED)	> 10	DW: detected (D22) GW: detected (G08) RW: - BF: - SW: detected (S02) WTPE: -
25321-41-9	-	Dimethylbenzene sulfonic acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D22) GW: detected (G08) RW: - BF: - SW: detected (S02) WTPE: -
288-88-0	206-022-9	1,2,4-triazole	(p)206-022-9; (t1)403-640-2; (t1)413-050-7; (t2)406-140-2; (t2)411-960-9	PMT	PMT	P: All biodegradation results in 301A and 302B tests imply no significant biodegradation. Therefore, this substance is assessed to be persistent in water. (Berger et al. 2018)	UBA: vM EC: vM min Dow=-0.7 (2a)	(Rep2)(EDC_UnderAssess)	< 10	DW: detected (D21) GW: detected (G08-SW?) RW: - BF: - SW: detected (S02) WTPE: -
5165-97-9	225-948-4	Sodium 2-methyl-2-[(1-oxoallyl)amino]propanesulphonate	(s1)225-948-4; ; (s1)611-646-3; (p)239-268-0; (s1)421-680-9	vPvM	vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 33d, found in several water samples in Schulze et al. (2019) and consistent indications of P across tested QSARs	UBA: vM EC: vM min Dow=-2.7 (2b)	Cramer Cl.III	> 10	DW: detected (D22) GW: detected (G08) RW: - BF: - SW: detected (S02) WTPE: -
56-93-9	200-300-3	Benzyltrimethylammonium chloride		vPvM	vPvM	Potential P/vP++: Reach dossiers all conclude not P, yet screening tests are ambiguous showing both P and not P, QSARs are consistently pointing to P, and this substance seems frequent in monitoring data of bank filtrate and drinking water	UBA: vM EC: vM min Dow=-2.2 (2c)	Cramer Cl.III	> 10	DW: detected (D22) GW: detected (G08) RW: - BF: - SW: detected (S02) WTPE: -
80-09-1	201-250-5	4,4'-sulphonyldiphenol		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: The 301C test indicates non readily biodegradable; however, QSAR data and other indicators indicate is more persistent than BPA	UBA: vM EC: M exp log Koc=2.3	(EDC_UnderAssess)(SINlist: This substance has endocrine disrupting properties. Bisphenol S has	> 10	DW: detected (D22) GW: detected (G08-SW?) RW: - BF: - SW: detected (S02) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
								shown to be estrogenic in in vitro studies. In vivo studies have shown impaired reproduction in zebrafish and uterine growth in rat.)(Pro.S.P._E D)		
834-12-8	212-634-7	Ametryn		vPvM & PMT	PMT	vP: measured max t1/2.max(d): w=n.d.; s=150(P); sed=1 780(vP)	UBA: vM EC: M exp log Koc=2.1	(Ecotox_PMT20 19)(Ecotox_Envirotox)	> 10	DW: detected (D02) GW: detected (G05) RW: - BF: - SW: detected (S02) WTPE: -
93-76-5	-	2,4,5-T		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D21) GW: max 4 ng/L (G01) RW: - BF: - SW: - WTPE: max 102 ng/L (W08)
15686-71-2	-	Cefalexin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: - RW: - BF: - SW: max 283 ng/L (S06,S03) WTPE: max 5 624 000 ng/L (W12)
-	485-140-4	4'-(2-Propyl-4-methyl-6-(1-methylbenzimidazolyl-2-yl)-benzimidazol-1-ylmethyl)biphenyl-2-carbonsäure Hydrochlorid		Not PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 574d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: Not M EC: Not M exp log Koc=6.2	Cramer Cl.III	< 10	DW: max 23 ng/L (D17) GW: - RW: - BF: - SW: max 1 130 ng/L (S06) WTPE: max 2 747 000 ng/L (W12,W08)
26787-78-0	248-003-8	Amoxicillin		vPvM & PMT	vPvM & PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 48d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test);	UBA: vM EC: vM min Dow=-3.6 (2b)	(STOTRE_Broad Consensus)(Ecotox_Envirotox)(Pro.S.P._ED)	> 10	DW: detected (D16) GW: - RW: - BF: - SW: max 1 654 ng/L (S06,S03) WTPE: max 30 000 ng/L (W12)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)				
26787-78-0	-	Amoxicillin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: - RW: - BF: - SW: max 1 654 ng/L (S06,S03) WTPE: max 30 000 ng/L (W12)
69-53-4	200-709-7	Ampicillin		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 49d, and consistency across all tested QSARs	UBA: vM EC: vM exp log Koc=-1.7	(STOTRE_Broad Consensus)	< 10	DW: detected (D16) GW: - RW: - BF: - SW: max 13 750 ng/L (S06) WTPE: max 27 100 ng/L (W12)
69-53-4	-	Ampicillin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: - RW: - BF: - SW: max 13 750 ng/L (S06) WTPE: max 27 100 ng/L (W12)
66108-95-0	266-164-2	Iohexol		vPvM	vPvM	Potential P/vP++: Not inherently biodegradable (ISO DIS 9408 (Ultimate Aerobic Biodegradability - Method by Determining the Oxygen Demand in a Closed Respirometer) and OECD 301F; ISO DIS 9408 (Ultimate Aerobic Biodegradability - Method by Determining the Oxygen Demand in a Closed Respirometer) and OECD 301F); found in several water monitoring studies; QSARs indicate persistence (QSARtoolbox P profiler and BIOWIN)	UBA: vM EC: vM min Dow=-0.5 (2a)	Cramer Cl.III	< 10	DW: max 11 050 ng/L (D02,D10) GW: - RW: - BF: - SW: max 4 470 ng/L (S01,S06) WTPE: max 7 700 ng/L (W08,W04,W12)
13674-87-8	237-159-2	Tris[2-chloro-1-(chloromethyl)ethyl] phosphate		vPvM & PMT	PMT	vP: estimated t1/2 (error factor 10) = 617d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. EU Method C.6 (Degradation: Chemical Oxygen Demand); EU Method C.5 (Degradation: Biochemical Oxygen Demand); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test);	UBA: vM EC: M exp log Koc=2.2	(Carc2)(SINlist: This substance has been detected in children who are exposed to the chemical through house dust. It is a	> 10	DW: max 510 ng/L (D02,D03) GW: - RW: - BF: - SW: max 2 360 ng/L (S01) WTPE: max 8 600 ng/L (W08)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						EU Method C.6 (Degradation: Chemical Oxygen Demand); EU Method C.5 (Degradation: Biochemical Oxygen Demand); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 302 C (Inherent Biodegradability: Modified MITI Test (II)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))		suspected carcinogen. The substance shows experimental and estimated P and T properties. It is considered to be of equivalent level of concern.)		
10118-90-8	-	Minocycline		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 2 ng/L (D16) GW: - RW: - BF: - SW: max 150 ng/L (S06) WTPE: max 6 000 ng/L (W12)
354812-41-2	-	Moxifloxacin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 12 ng/L (D16) GW: - RW: - BF: - SW: max 205 ng/L (S06) WTPE: max 4 752 ng/L (W12)
25953-19-9	-	Cefazolin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: - RW: - BF: - SW: max 750 ng/L (S06,S03) WTPE: max 2 730 ng/L (W12)
1929-86-8	217-683-8	Potassium 2-(4-chloro-2-methylphenoxy)propionate	(s1)217-683-8; (p)230-386-8; (p)240-539-0	insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 24d	UBA: vM EC: vM min Dow=-1.0 (2b)	Cramer Cl.III	< 10	DW: detected (D21) GW: - RW: - BF: - SW: max 57 ng/L (S01) WTPE: max 2 209 ng/L (W08,W06,W08)
144689-63-4	-	Olmesartan		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 20 ng/L (D18) GW: - RW: - BF: - SW: max 2 200 ng/L (S06) WTPE: max 1 200 ng/L (W12)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
49562-28-9	256-376-3	Fenofibrate		Not PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 84d, and BOWIN screen tool as recommended in the PBT guideline	UBA: Not M EC: Not M min Dow=6.9 (2a)	Cramer Cl.III	< 10	DW: max 1 ng/L (D17) GW: - RW: - BF: - SW: max 280 ng/L (S06,S03) WTPE: max 2 100 ng/L (W12,W08)
110871-86-8	-	Sparfloxacin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: - RW: - BF: - SW: max 2 090 ng/L (S06,S03) WTPE: max 500 ng/L (W12)
87-08-1	-	Phenoxymethylpenicillin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: - RW: - BF: - SW: max 20 ng/L (S06,S03) WTPE: max 2 000 ng/L (W12)
74011-58-8	-	Enoxacin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 31 ng/L (D16) GW: - RW: - BF: - SW: max 508 ng/L (S06,S03) WTPE: max 1 800 ng/L (W12)
50-06-6	200-007-0	Phenobarbital		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 75d	UBA: vM EC: vM exp log Koc=0.9	Cramer Cl.III	< 10	DW: max 40 ng/L (D18,D14) GW: - RW: - BF: - SW: max 1 500 ng/L (S06,S01) WTPE: max 170 ng/L (W12)
81093-37-0	-	Pravastatin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 5 ng/L (D17) GW: - RW: - BF: - SW: max 78 ng/L (S06,S01) WTPE: max 1 500 ng/L (W12,W05)
50-48-6	200-041-6	Amitriptyline	(p)200-041-6; (p)208-964-6	PM	Not PMT/vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 248d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: M EC: Not M exp log Koc=4.0	Cramer Cl.III	< 10	DW: max 1 ng/L (D09) GW: - RW: - BF: - SW: max 71 ng/L (S06,S01) WTPE: max 1 490 ng/L (W12,W08)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
2447-57-6	-	Sulfadoxine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: - RW: - BF: - SW: max 1 460 ng/L (S06,S03) WTPE: max 0 ng/L (W12)
17090-79-8	-	Monensin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 76 ng/L (D17,D16) GW: - RW: - BF: - SW: max 1 172 ng/L (S06,S01,S03) WTPE: max 190 ng/L (W12)
299-42-3	-	Ephedrine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 1 ng/L (D17) GW: - RW: - BF: - SW: max 78 ng/L (S06) WTPE: max 1 080 ng/L (W12)
38821-53-3	-	Cefradine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: - RW: - BF: - SW: detected (S03) WTPE: max 1 020 ng/L (W12)
63-74-1	200-563-4	Sulphanilamide		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 73d	UBA: vM EC: vM exp log Koc=-0.7	Cramer Cl.III	< 10	DW: max 24 ng/L (D16) GW: - RW: - BF: - SW: max 930 ng/L (S06) WTPE: max 1 000 ng/L (W12)
59277-89-3	-	Aciclovir		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D14) GW: - RW: - BF: - SW: max 787 ng/L (S06,S01) WTPE: max 148 ng/L (W12)
63527-52-6	264-299-1	Cefotaxime		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 39d	UBA: vM EC: vM min Dow=-4.3 (2b)	(STOTRE_Broad Consensus)	< 10	DW: detected (D16) GW: - RW: - BF: - SW: max 9 ng/L (S06) WTPE: max 741 ng/L (W12)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
63527-52-6	-	Cefotaxime		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: - RW: - BF: - SW: max 9 ng/L (S06) WTPE: max 741 ng/L (W12)
846-49-1	-	Lorazepam		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 4 ng/L (D17) GW: - RW: - BF: - SW: max 240 ng/L (S06,S01) WTPE: max 532 ng/L (W12,W05)
5011-34-7	225-690-2	Trimetazidine		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 63d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM min Dow=-4.1 (2c)	Cramer Cl.III	< 10	DW: max 4 ng/L (D17) GW: - RW: - BF: - SW: max 3 ng/L (S06) WTPE: max 458 ng/L (W12)
68-22-4	200-681-6	Norethisterone		PMT	Potential PMT/vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 108d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)	UBA: M EC: Pot. M/vM min Dow=2.7 (2a)	(Rep_BroadCon sensus)(Pro.S.P. _ED)	< 10	DW: max 8 ng/L (D17) GW: - RW: - BF: - SW: max 13 ng/L (S06,S01,S03) WTPE: max 450 ng/L (W12)
55297-95-5	-	Tiamulin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 2 ng/L (D17,D16) GW: - RW: - BF: - SW: max 200 ng/L (S06,S03) WTPE: max 445 ng/L (W08)
51940-44-4	-	Pipemidic acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: - RW: - BF: - SW: max 245 ng/L (S06) WTPE: max 430 ng/L (W12)
61-33-6	-	Benzylpenicillin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 250 ng/L (S06,S03) WTPE: max 300 ng/L (W12)
57-91-0	-	17-alpha-Estradiol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 0 ng/L (D17) GW: - RW: - BF: - SW: max 280 ng/L (S06,S03) WTPE: max 240 ng/L (W12)
42835-25-6	-	Flumequine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: - RW: - BF: - SW: max 32 ng/L (S06,S03) WTPE: max 257 ng/L (W08,W12)
112398-08-0	-	Danofloxacin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 6 ng/L (D16) GW: - RW: - BF: - SW: max 245 ng/L (S06,S03) WTPE: max 245 ng/L (W12)
3922-90-5	-	Oleandomycin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 5 ng/L (D16) GW: - RW: - BF: - SW: max 20 ng/L (S06) WTPE: max 190 ng/L (W12)
148-79-8	-	Thiabendazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 3 ng/L (D16) GW: - RW: - BF: - SW: max 188 ng/L (S06,S01) WTPE: max 73 ng/L (W12)
1220-83-3	-	Sulfamonomethoxine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: - RW: - BF: - SW: max 167 ng/L (S06,S01,S03) WTPE: max 8 ng/L (W12)
144-80-9	205-640-6	Sulfacetamide		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 80d	UBA: vM EC: vM exp log Koc=-0.8	Cramer Cl.III	< 10	DW: detected (D16) GW: - RW: - BF: -



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 12 ng/L (S06,S03) WTPE: max 151 ng/L (W09)
87333-19-5	-	Ramipril		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 3 ng/L (D17) GW: - RW: - BF: - SW: max 73 ng/L (S06) WTPE: max 143 ng/L (W12)
797-63-7	-	Levonorgestrel		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 46 ng/L (D17) GW: - RW: - BF: - SW: max 6 ng/L (S06) WTPE: max 126 ng/L (W12)
131-57-7	205-031-5	Oxybenzone		PMT	Not PMT/vPvM	vP: vP according to Vione et al STOTEN (2013); and consistent indications of P across tested QSARs	UBA: M EC: Not M exp log Koc=3.2	(EDC_UnderAssess)(SINlist: Benzophenone-3 (BP-3) is an endocrine disruptor with estrogenic, antiandrogen and thyroid activity, affecting several body functions including development and immune function. The substance has been found in biomonitoring studies and in human milk and urine. It is categorized as an endocrine disruptor in the EU Commission Database.)(Pro. S.P_ED)	> 10	DW: detected (D02) GW: - RW: - BF: - SW: max 39 ng/L (S01) WTPE: max 121 ng/L (W10)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
76-99-3	200-996-9	Methadone	(p)200-996-9; (p)603-081-6; (s1)606-470-9	Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 207d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: M exp log Koc=2.6	Cramer Cl.III	< 10	DW: max 0 ng/L (D17) GW: - RW: - BF: - SW: max 37 ng/L (S06,S01) WTPE: max 120 ng/L (W12)
70458-92-3	-	Pefloxacin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 10 ng/L (D16) GW: - RW: - BF: - SW: max 64 ng/L (S06,S03) WTPE: max 112 ng/L (W12)
54063-53-5	258-955-6	Propafenone		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 47d	UBA: vM EC: M exp log Koc=2.3	Cramer Cl.III	< 10	DW: max 4 ng/L (D17) GW: - RW: - BF: - SW: max 87 ng/L (S06) WTPE: max 69 ng/L (W12)
27619-97-2	248-580-6	3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctanesulphonic acid	(s1)261-818-3; (p)248-580-6	vPvM	vPvM	Potential P/vP++: short-chain PFAS, estimated t1/2 (error factor 10) = 2 937d, weight-of-evidence (this study) based on all used QSARs and no biodeg. observed in majority of biodegradation screen tests for substance/main transformation products, e.g. -	UBA: vM EC: vM exp log Koc=1.3	Cramer Cl.III	> 10	DW: max 6 ng/L (D01) GW: - RW: - BF: - SW: max 16 ng/L (S01) WTPE: max 38 ng/L (W01)
28657-80-9	-	Cinoxacin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: - RW: - BF: - SW: max 18 ng/L (S06) WTPE: max 20 ng/L (W12)
80370-57-6	-	Ceftiofur		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 1 ng/L (D16) GW: - RW: - BF: - SW: max 4 ng/L (S06) WTPE: max 18 ng/L (W12)
31329-57-4	250-572-2	Naftidrofuryl		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 85d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM min Dow=-0.7 (2c)	Cramer Cl.III	< 10	DW: max 4 ng/L (D17) GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 0 ng/L (S06) WTPE: max 14 ng/L (W12)
100-88-9	202-898-1	N-cyclohexylsulphamic acid	(s1)205-348-9; (p)202-898-1	insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 33d	UBA: vM EC: vM min Dow=-1.8 (2b)	Cramer Cl.III	< 10	DW: - GW: max 28 ng/L (G13) RW: max 370 ng/L (R05) BF: - SW: max 29 400 ng/L (S01) WTPE: -
71-55-6	200-756-3	1,1,1-trichloroethane		vPvM	PM	Potential P/vP++: estimated t1/2 (error factor 10) = 107d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: M min Dow=2.5 (2a)	Cramer Cl.III	< 10	DW: - GW: max 10 000 ng/L (G06) RW: max 210 ng/L (R05) BF: - SW: max 23 ng/L (S01) WTPE: -
58955-93-4	-	10,11-Dihydro-10,11-Dihydroxy Carbamazepine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 5 600 ng/L (G15,G13) RW: max 80 ng/L (R05) BF: - SW: detected (S03) WTPE: -
81-07-2	201-321-0	1,2-benzisothiazol-3(2H)-one 1,1-dioxide	(s1)204-886-1; (p)201-321-0; (t5)401-190-1	PM	Not PMT/vPvM	Potential P/vP++: the reported t1/2 in soil is 30d; however, it is found in several water samples in Schulze et al. (2019) and consistent indications of P across tested QSARs. Thus, it is considered sufficiently P in the environment	UBA: M EC: Not M exp log Koc=3.3	Cramer Cl.III	> 10	DW: - GW: max 14 ng/L (G13) RW: max 220 ng/L (R05) BF: - SW: max 2 980 ng/L (S01,S01,S02) WTPE: -
140-66-9	205-426-2	4-(1,1,3,3-tetramethylbutyl)phenol		PMT	Not PMT/vPvM	P: measured max t1/2.max(d): w=60(P); s=41(not P); sed=20(not P)	UBA: M EC: Not M exp log Koc=4.0	(SVHC: Endocrine disrupting properties (Article 57(f) - environment))(P BT_UnderAssess)(Ecotox_PMT2019)(Ecotox_Envirotox)(SINlist: Substance is concluded to be an endocrine disruptor SVHC by ECHA Member State	> 10	DW: - GW: max 1 800 ng/L (G07,G01) RW: max 50 ng/L (R05) BF: - SW: max 355 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
								Committee.)(Pr o.S.P._ED)		
886-50-0	-	Terbutryn		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 180 ng/L (G07,G13) RW: max 0 ng/L (R03) BF: - SW: max 1 688 ng/L (S01) WTPE: -
2634-33-5	220-120-9	1,2-benzisothiazol-3(2H)-one	(p)220-120-9; (s1)411-690-1	Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: weight-of-evidence (this study) based on all known QSARs and no biodeg. observed in majority of biodegradation screen tests, e.g. OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: vM EC: vM exp log Koc=1.0	-	> 10	DW: - GW: max 6 ng/L (G13) RW: max 1 100 ng/L (R05) BF: - SW: max 903 ng/L (S01) WTPE: -
2164-08-1	-	Lenacil		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 8 ng/L (G13) RW: max 50 ng/L (R05) BF: - SW: max 326 ng/L (S01) WTPE: -
18691-97-9	-	Methabenzthiazuron		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 516 ng/L (G01) RW: max 10 ng/L (R05) BF: - SW: - WTPE: max 178 ng/L (W08)
314-40-9	206-245-1	Bromacil		insufficient data	insufficient data	no conclusion/data: no data	UBA: vM EC: vM exp log Koc=1.6	(Ecotox_Envirotox)	< 10	DW: - GW: - RW: max 760 ng/L (R05,R06) BF: max 140 ng/L (B03) SW: max 100 ng/L (S01) WTPE: -
108-95-2	203-632-7	Phenol	(p)203-632-7; (p)266-273-5; (p)272-486-4; (p)306-115-5; (s1)500-006-8; (p)500-086-4; (p)931-252-8; (p)931-468-2;	Not PMT/vPvM	Not PMT/vPvM	Not P: 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: vM EC: vM exp log Koc=1.5	(Mut2)	> 10	DW: - GW: - RW: max 200 ng/L (R05) BF: max 490 ng/L (B03) SW: max 151 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
			(s2)253-410-9; (s4)447-750-9; (t2)202-981-2; (t1-1)254-487-1; (t1-2)202-981-2							
112-49-2	203-977-3	1,2-bis(2-methoxyethoxy)ethane		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 526d	UBA: vM EC: vM exp log Koc=-1.3	(SVHC: Toxic for reproduction (Article 57c))(Rep1)(SINlist: Classified CMR according to Annex VI of Regulation 1272/2008)	> 10	DW: - GW: - RW: max 189 ng/L (R05) BF: max 149 ng/L (B01) SW: max 16 ng/L (S01) WTPE: -
1812-30-2	-	Bromazepam		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: max 14 ng/L (R04) BF: - SW: max 356 ng/L (S06) WTPE: max 3 662 000 ng/L (W12)
50-27-1	-	Estriol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: max 72 ng/L (R04) BF: - SW: max 480 ng/L (S06,S01,S03) WTPE: max 83 430 ng/L (W12)
58-25-3	-	Chlordiazepoxide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: max 265 ng/L (R04) BF: - SW: max 0 ng/L (S06) WTPE: max 29 395 ng/L (W12)
81-81-2	201-377-6	Warfarin		PMT	PMT	P: measured max t1/2.max(d): w=n.d.; s=150(P); sed=n.d.	UBA: vM EC: vM min Dow=0.4 (2b)	(Rep1)(SINlist: Classified CMR according to Annex VI of Regulation 1272/2008)	< 10	DW: - GW: - RW: max 3 ng/L (R04) BF: - SW: max 240 ng/L (S06,S01) WTPE: max 15 000 ng/L (W12)
66357-35-5	266-332-5	Ranitidine		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 283d, and consistency across all tested QSARs	UBA: vM EC: vM exp log Koc=-0.9	(STOTRE_Broad Consensus)	< 10	DW: - GW: - RW: max 20 ng/L (R05,R03)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										BF: - SW: max 570 ng/L (S06,S01) WTPE: max 2 723 ng/L (W12,W08,W10)
66357-35-5	-	Ranitidine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: max 20 ng/L (R05,R03) BF: - SW: max 570 ng/L (S06,S01) WTPE: max 2 723 ng/L (W12,W08,W10)
10540-29-1	234-118-0	Tamoxifen		Not PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 193d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: Not M EC: Not M exp log Koc=5.4	(Carc_BroadConsensus)(Rep_BroadConsensus)(PBT_UnderAssess)	< 10	DW: - GW: - RW: max 0 ng/L (R04) BF: - SW: max 1 296 ng/L (S06) WTPE: max 369 ng/L (W12,W08)
23031-25-6	-	Terbutaline		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: max 20 ng/L (R05) BF: - SW: max 30 ng/L (S06) WTPE: max 600 ng/L (W12,W08)
76824-35-6	-	Famotidine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: max 0 ng/L (R03) BF: - SW: max 217 ng/L (S06,S01) WTPE: max 495 ng/L (W12)
36894-69-6	253-258-3	Labetalol		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 68d, and consistency across all tested QSARs	UBA: vM EC: vM exp log Koc=1.2	(Pro.S.P._ED)	< 10	DW: - GW: - RW: max 16 ng/L (R04) BF: - SW: max 3 ng/L (S06) WTPE: max 480 ng/L (W12)
82626-48-0	617-367-3	N,N-Dimethyl-2-[6-methyl-2-(4-methylphenyl)imidazo[1,2-a]pyridin-3-yl]acetamide		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 85d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: M exp log Koc=2.2	Cramer Cl.III	< 10	DW: - GW: - RW: max 6 ng/L (R04) BF: - SW: max 6 ng/L (S06) WTPE: max 426 ng/L (W08,W12)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
79617-96-2	-	Sertraline		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: max 12 ng/L (R04) BF: - SW: max 28 ng/L (S06,S01) WTPE: max 375 ng/L (W08,W12)
16846-24-5	-	Josamycin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: max 0 ng/L (R03) BF: - SW: max 156 ng/L (S06,S03) WTPE: max 270 ng/L (W12)
63659-18-7	-	Betaxolol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: max 13 ng/L (R04) BF: - SW: max 28 ng/L (S06) WTPE: max 190 ng/L (W12)
50-53-3	200-045-8	Chlorpromazine		Not PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 422d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: Not M EC: Not M exp log Koc=4.3	Cramer Cl.III	< 10	DW: - GW: - RW: max 7 ng/L (R04) BF: - SW: max 1 ng/L (S06) WTPE: max 104 ng/L (W08)
113665-84-2	-	Clopidogrel		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: max 5 ng/L (R04) BF: - SW: max 20 ng/L (S06) WTPE: max 40 ng/L (W12)
36993-94-9	-	Metamitron-Desamino		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 27 ng/L (G13) RW: - BF: detected (B04) SW: max 680 ng/L (S01) WTPE: -
19988-24-0	-	Atrazin-desethyl-2-hydroxy		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 8 ng/L (G13) RW: - BF: detected (B04) SW: max 27 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
-	TP of: 204-535-2	Simazine-metabolite	(t1)204-535-2	insufficient data	insufficient data	no conclusion/data: no data	UBA: vM EC: vM min Dow=-1.9 (2c)	-	< 10	DW: - GW: max 1 ng/L (G13) RW: - BF: detected (B04) SW: max 6 ng/L (S01) WTPE: -
31879-05-7	-	Fenoprofen		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 11 ng/L (G15) RW: - BF: - SW: max 241 ng/L (S06,S03) WTPE: max 2 571 000 ng/L (W12)
96-88-8	-	Mepivacaine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 3 ng/L (G13) RW: - BF: - SW: max 15 ng/L (S06) WTPE: max 1 147 000 ng/L (W12)
87-86-5	-	Pentachlorophenol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 33 ng/L (G15) RW: - BF: - SW: max 8 300 ng/L (S06) WTPE: max 30 000 ng/L (W12)
57-27-2	-	Morphine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 27 ng/L (G07) RW: - BF: - SW: max 21 700 ng/L (S06,S01,S06) WTPE: max 1 270 ng/L (W12)
28721-07-5	-	Oxcarbazepine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 100 ng/L (G02) RW: - BF: - SW: max 852 ng/L (S06,S01,S06) WTPE: max 11 000 ng/L (W12)
83-15-8	-	N-Acetyl-4-aminoantipyrin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 100 ng/L (G02) RW: - BF: - SW: max 1 757 ng/L (S01,S03) WTPE: max 6 745 ng/L (W10)



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
483-63-6	-	Crotamiton		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 3 000 ng/L (G02,G15) RW: - BF: - SW: max 6 000 ng/L (S06,S01) WTPE: max 100 ng/L (W12)
76-74-4	200-983-8	Pentobarbital		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 62d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: vM exp log Koc=0.9	Cramer Cl.III	< 10	DW: - GW: max 1 000 ng/L (G02) RW: - BF: - SW: max 5 400 ng/L (S06,S01) WTPE: max 67 ng/L (W12)
144-82-1	-	Sulfamethizole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 9 ng/L (G07) RW: - BF: - SW: max 100 ng/L (S06,S01,S03) WTPE: max 5 200 ng/L (W12)
8025-81-8	-	Spiramycin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: detected (G14) RW: - BF: - SW: max 488 ng/L (S06,S03) WTPE: max 4 000 ng/L (W12)
121-75-5	-	Malathion		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 3 500 ng/L (G07) RW: - BF: - SW: max 55 ng/L (S01) WTPE: max 0 ng/L (W06)
94-74-6	-	MCPA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 36 ng/L (G01,G05) RW: - BF: - SW: max 1 470 ng/L (S01) WTPE: max 2 404 ng/L (W08,W06,W08)
6493-05-6	-	Pentoxifylline		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 100 ng/L (G02) RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 619 ng/L (S06) WTPE: max 1 400 ng/L (W12)
19982-08-2	-	Memantine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 31 ng/L (G13) RW: - BF: - SW: max 15 ng/L (S06) WTPE: max 1 312 ng/L (W08,W12)
100-02-7	202-811-7	4-nitrophenol		Not PMT/vPvM	Not PMT/vPvM	Not P: not P according to WHO <a href="https://www.who.int/ipcs/publications/cicad/en/cicad20.pdf">https://www.who.int/ipcs/publications/cicad/en/cicad20.pdf</a>	UBA: vM EC: vM exp log Koc=1.4	(SINlist: 4-nitrophenol is an endocrine disruptor with estrogenic and antiandrogen activity, affecting reproduction and also cardiovascular function. It is categorized as an endocrine disruptor in the EU Commission EDC database.)(Pro.S.P._ED)	< 10	DW: - GW: max 122 ng/L (G01) RW: - BF: - SW: max 22 ng/L (S01) WTPE: max 1 301 ng/L (W08)
28179-44-4	248-887-5	Ioxitalamic acid	(s1)926-540-5; (p)248-887-5	vPvM	vPvM	vP: estimated t1/2 (error factor 10) = 28 561d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM min Dow=-1.5 (2b)	Cramer Cl.III	< 10	DW: - GW: max 100 ng/L (G02,G13) RW: - BF: - SW: max 438 ng/L (S06) WTPE: max 1 300 ng/L (W12)
86386-73-4	-	Fluconazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 6 ng/L (G13) RW: - BF: - SW: max 482 ng/L (S06,S01,S03) WTPE: max 1 100 ng/L (W12,W08)
665-66-7	211-560-2	Amantadine hydrochloride	(s1)211-560-2; (p)212-201-2; (s1)250-604-5	PM	PM	P: No significant biodegradation in 302B tests. Therefore, this substance is assessed to be persistent in water. (Berger et al. 2018)	UBA: vM EC: vM exp log Koc=1.6	Cramer Cl.III	< 10	DW: - GW: detected (G08) RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: detected (S02) WTPE: max 500 ng/L (W12)
57775-29-8	-	Carazolol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 3 ng/L (G15) RW: - BF: - SW: max 245 ng/L (S06) WTPE: max 120 ng/L (W12)
56211-40-6	-	Torsemide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 2 ng/L (G13) RW: - BF: - SW: max 72 ng/L (S06) WTPE: max 147 ng/L (W12)
58-22-0	200-370-5	Testosterone		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 73d, and consistency across all tested QSARs	UBA: M EC: Pot. M/vM min Dow=2.8 (2a)	(Rep_BroadConsensus)(Pro.S.P._ED)	< 10	DW: - GW: max 1 ng/L (G15) RW: - BF: - SW: max 100 ng/L (S06,S01,S03) WTPE: max 137 ng/L (W12)
116-43-8	-	Succinylsulfathiazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 2 ng/L (G15) RW: - BF: - SW: max 37 ng/L (S06) WTPE: max 107 ng/L (W12)
526-36-3	-	Xylometazoline		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 2 ng/L (G13) RW: - BF: - SW: max 9 ng/L (S06) WTPE: max 6 ng/L (W12)
58-15-1	-	Dimethylaminophenazone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: max 8 842 ng/L (B07) SW: max 340 ng/L (S06,S01) WTPE: max 1 000 ng/L (W12)
126-71-6	204-798-3	Triisobutyl phosphate		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test);	UBA: Pot. M/vM EC: Not M min Dow=3.7 (2a)	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: max 19 ng/L (B01)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)				SW: max 1 021 ng/L (S01) WTPE: max 8 700 ng/L (W08)
84-74-2	201-557-4	Dibutyl phthalate		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): EU Method C.4-C (Determination of the "Ready" Biodegradability - Carbon Dioxide Evolution Test); EU Method C.4-C (Determination of the "Ready" Biodegradability - Carbon Dioxide Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: Pot. M/vM EC: Not M min Dow=4.5 (2a)	(SVHC: Toxic for reproduction (Article 57c)#Endocrine disrupting properties (Article 57(f) - human health))(Rep1)(P BT_UnderAssess)(Ecotox_Enviro tox) (DNEL)(SINlist: Classified CMR according to Annex VI of Regulation 1272/2008)(Pro. S.P. ED)	> 10	DW: max 2 730 ng/L (D07) GW: - RW: max 191 ng/L (R05) BF: - SW: - WTPE: -
85-68-7	201-622-7	Benzyl butyl phthalate		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: M EC: Not M exp log Koc=3.4	(SVHC: Toxic for reproduction (Article 57c)#Endocrine disrupting properties (Article 57(f) - human health))(Rep1)(S INlist: Classified CMR according to Annex VI of Regulation 1272/2008)(Pro. S.P. ED)	< 10	DW: max 911 ng/L (D07) GW: - RW: max 220 ng/L (R05) BF: - SW: - WTPE: -
106-42-3	203-396-5	p-xylene	(p)203-396-5; (s3)215-535-7	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry)	UBA: vM EC: M exp log Koc=2.3	Cramer Cl.III	> 10	DW: max 100 ng/L (D18) GW: - RW: max 360 ng/L (R05) BF: - SW: - WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)				
108-38-3	203-576-3	m-xylene	(p)203-576-3; (s2)215-535-7	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: vM EC: M exp log Koc=2.3	Cramer Cl.III	> 10	DW: max 100 ng/L (D18) GW: - RW: max 360 ng/L (R05) BF: - SW: - WTPE: -
126-86-3	204-809-1	2,4,7,9-tetramethyldec-5-yne-4,7-diol	(p)204-809-1; (s1)500-022-5	PM	Not PMT/vPvM	P: All biodegradation results in 301B and 302B tests imply no significant biodegradation. Therefore, this substance is assessed to be persistent in water. (Berger et al. 2018)	UBA: M EC: Not M exp log Koc=3.2	Cramer Cl.III	> 10	DW: max 240 ng/L (D07) GW: - RW: max 135 ng/L (R05) BF: - SW: - WTPE: -
87-61-6	201-757-1	1,2,3-trichlorobenzene		vPvM & PMT	PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 117d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: vM EC: M exp log Koc=2.9	(SINlist: Substance is concluded to be PBT by European Chemicals Bureau PBT Working Group.)	< 10	DW: max 160 ng/L (D02) GW: - RW: max 30 ng/L (R05) BF: - SW: - WTPE: -
1066-51-9	-	(aminomethyl)phosphonic Acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 30 ng/L (D18) GW: - RW: max 141 ng/L (R05) BF: - SW: - WTPE: -
79-00-5	201-166-9	1,1,2-trichloroethane		vPvM & PMT	vPvM & PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 56d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), available QSARs and no biodeg. observed in majority of	UBA: vM EC: vM exp log Koc=1.7	(Carc2)	< 10	DW: max 100 ng/L (D02) GW: - RW: max 134 ng/L (R05) BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						biodegradation screen tests e.g. OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))				SW: - WTPE: -
375-22-4	-	PFBA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 13 ng/L (D06,D01) GW: - RW: max 8 ng/L (R02) BF: - SW: - WTPE: -
85-98-3	201-645-2	1,3-diethylidiphenylurea		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 78d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), available QSARs and no biodeg. observed in majority of biodegradation screen tests e.g. EU Method C.4-E (Determination of the "Ready" Biodegradability - Closed Bottle Test); EU Method C.4-E (Determination of the "Ready" Biodegradability - Closed Bottle Test)	UBA: vM EC: M exp log Koc=2.5	Cramer Cl.III	> 10	DW: detected (D14) GW: - RW: max 10 ng/L (R05) BF: - SW: - WTPE: -
60-00-4	200-449-4	Edetic acid	(s1)200-529-9; (s1)200-573-9; (s1)227-743-5; (s1)238-372-3; (s1)238-729-3; (s1)239-407-5; (s1)239-802-2; (s1)241-543-5; (s1)244-063-4; (s1)245-022-3; (s1)259-411-0; (s1)267-400-7; (s1)268-144-9; (s1)692-065-2; (s1)824-774-1; (s1)205-758-8; (s1)205-358-3; (s1)217-895-0; (s1)825-116-6; (s1)927-442-5; (p)200-449-4; (s1)237-865-0;	Potential PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 26d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 A (Ready Biodegradability: DOC Die Away Test); OECD Guideline 301 A (Ready Biodegradability: DOC Die Away Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: M EC: Not M exp log Koc=3.0	Cramer Cl.III	> 10	DW: max 13 600 ng/L (D10,D21) GW: max 10 000 ng/L (G02) RW: - BF: - SW: - WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
			(s1)240-073-8; (s1)270-232-7							
67-43-6	200-652-8	N-carboxymethyliminobis(ethylenitrilo)tetraacetic acid	(s1)205-391-3; (s1)289-064-0; (s1)813-880-3; (s1)235-627-0; (s1)404-290-3; (s1)902-532-7; (p)200-652-8; (s1)235-979-5; (p)243-136-8; (s1)902-533-2	Potential PMT/vPvM	Potential PMT/vPvM	vP: No degradation in OECD TG 309 (Hofman-Caris and Claßen, 2020), calculated half-life DTPA: >67.6 days. , weight-of-evidence by discovery in monitoring studies (UBA, 2019), available QSARs and no biodeg. observed in majority of biodegradation screen tests e.g. OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: vM EC: vM min Dow=-19.5 (2b)	Cramer Cl.III	> 10	DW: max 9 000 ng/L (D10,D21) GW: max 3 000 ng/L (G02) RW: - BF: - SW: - WTPE: -
56-23-5	200-262-8	Carbon tetrachloride		vPvM & PMT	vPvM & PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 172d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: vM exp log Koc=1.9	(Carc2)	> 10	DW: max 2 240 ng/L (D02) GW: max 5 000 ng/L (G06) RW: - BF: - SW: - WTPE: -
95-63-6	202-436-9	1,2,4-trimethylbenzene		Not PMT/vPvM	Not PMT/vPvM	Not P: REACH dossier information	UBA: vM EC: M exp log Koc=2.6	Cramer Cl.III	> 10	DW: max 130 ng/L (D02) GW: max 5 000 ng/L (G06) RW: - BF: - SW: - WTPE: -
96-12-8	202-479-3	1,2-dibromo-3-chloropropane		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 55d, and consistency across all tested QSARs	UBA: vM EC: M exp log Koc=2.3	(Carc1ab)(Mut1)(Rep1)(SINlist: Classified CMR according to Annex VI of Regulation 1272/2008)(Pro. S.P._ED)	< 10	DW: max 140 ng/L (D02) GW: max 5 000 ng/L (G06) RW: - BF: - SW: - WTPE: -
142363-53-9	-	Alachlor ESA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 1 200 ng/L (D02) GW: max 47 ng/L (G13) RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: - WTPE: -
3984-14-3	-	dimethylsulfamide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 30 ng/L (D18) GW: max 470 ng/L (G13) RW: - BF: - SW: - WTPE: -
519-65-3	-	AMDOHPH		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 130 ng/L (D18) GW: max 4 ng/L (G13) RW: - BF: - SW: - WTPE: -
1610-17-9	-	Atraton		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D02) GW: max 0 ng/L (G13,G05) RW: - BF: - SW: - WTPE: -
309-00-2	-	Aldrin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D02) GW: detected (G05) RW: - BF: - SW: - WTPE: -
58-89-9	-	Lindane		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D02) GW: detected (G05) RW: - BF: - SW: - WTPE: -
77521-29-0	-	AMPA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 1 100 ng/L (D10) GW: - RW: - BF: - SW: max 9 500 ng/L (S01) WTPE: -
120-18-3	204-375-3	Naphthalene-2-sulphonic acid	(s1)208-523-8; (p)204-375-3	Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vp: estimated t1/2 (error factor 10) = 73d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), available	UBA: vM EC: vM min Dow=-0.2 (2b)	Cramer Cl.III	> 10	DW: detected (D22) GW: - RW: - BF: -



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						QSARs and no biodeg. observed in majority of biodegradation screen tests e.g. OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test); OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)				SW: max 5 034 ng/L (S01) WTPE: -
58955-94-5	-	10,11-Dihydroxy-10,11-dihydrocarbamazepin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 40 ng/L (D18) GW: - RW: - BF: - SW: max 5 023 ng/L (S01) WTPE: -
25013-16-5	246-563-8	tert-butyl-4-methoxyphenol		Not PMT/vPvM	Not PMT/vPvM	Not P: REACH dossier	UBA: M EC: Not M exp log Koc=3.1	(EDC_UnderAssess)(SINlist: BHA is associated with reproductive dysfunction, increased cancer risk, including breast and prostate, and a range of other chronic or irreversible health problems, often from very low levels of exposure. BHA is commonly detected in humans.)(Pro.S.P._ED)	> 10	DW: max 3 450 ng/L (D07) GW: - RW: - BF: - SW: max 136 ng/L (S01) WTPE: -
651-06-9	-	Sulfamethoxine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: - RW: - BF: - SW: max 3 407 ng/L (S06,S03) WTPE: -
58-55-9	200-385-7	Theophylline		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 A (Ready Biodegradability: DOC Die Away Test);	UBA: vM EC: vM	-	< 10	DW: detected (D16) GW: - RW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						OECD Guideline 301 A (Ready Biodegradability: DOC Die Away Test)	min Dow=-1.3 (2a)			BF: - SW: max 930 ng/L (S06) WTPE: -
95-16-9	202-396-2	Benzothiazole	(p)202-396-2; (t1)205-736-8	Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: biodegradation screening tests give conflicting results	UBA: vM EC: vM exp log Koc=1.3	Cramer Cl.III	> 10	DW: max 10 ng/L (D10) GW: - RW: - BF: - SW: max 881 ng/L (S01) WTPE: -
60207-90-1	-	Propiconazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 0 ng/L (D05) GW: - RW: - BF: - SW: max 810 ng/L (S01,S01) WTPE: -
74-95-3	200-824-2	Dibromomethane		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 30d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: vM exp log Koc=1.3	Cramer Cl.III	> 10	DW: max 740 ng/L (D02) GW: - RW: - BF: - SW: max 34 ng/L (S01) WTPE: -
3737-09-5	223-110-2	Disopyramide		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 321d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM exp log Koc=1.4	Cramer Cl.III	< 10	DW: max 3 ng/L (D17) GW: - RW: - BF: - SW: max 710 ng/L (S06,S03) WTPE: -
100-97-0	202-905-8	Methenamine	(p)202-905-8; (s1)687-538-5	Not PMT/vPvM	Not PMT/vPvM	vP: No degradation in OECD TG 309 (Hofman-Caris and Claßen, 2020), calculated half-life urotropin: >128 days. EU Method C.4-E (Determination of the "Ready" Biodegradability - Closed Bottle Test); EU Method C.4-E (Determination of the "Ready" Biodegradability - Closed Bottle Test); EU Method C.6 (Degradation: Chemical Oxygen Demand) 1984; EU Method C.6 (Degradation: Chemical Oxygen Demand) 1984; OECD Guideline 301 A (Ready Biodegradability: DOC Die Away Test)	UBA: vM EC: vM min Dow=-6.6 (2a)	Cramer Cl.III	> 10	DW: max 520 ng/L (D15) GW: - RW: - BF: - SW: detected (S04) WTPE: -
34256-82-1	-	Acetochlor		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 500 ng/L (D02) GW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										RW: - BF: - SW: max 60 ng/L (S01) WTPE: -
98-86-2	202-708-7	Acetophenone	(p)202-708-7; (t1-1)202-849-4; (t1-1)271-138-9; (t1-1)271-635-0; (t1-1)700-371-5; (t1-1)905-562-9; (t1-1)905-588-0	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: vM EC: vM exp log Koc=1.3	-	> 10	DW: max 490 ng/L (D02) GW: - RW: - BF: - SW: max 223 ng/L (S01) WTPE: -
5466-77-3	-	Octyl methoxy cinnamate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 450 ng/L (D07) GW: - RW: - BF: - SW: max 135 ng/L (S01) WTPE: -
119-61-9	204-337-6	Benzophenone		vPvM & PMT	PMT	Potential P/vP++: P discussion has no current consensus, REACH dossier evaluations favour screening tests showing readily biodegradation, but results from screening tests are wide spread. There is more discussion on this from IARC-WHO ( <a href="https://monographs.iarc.who.int/wp-content/uploads/2018/06/mono101-007.pdf">https://monographs.iarc.who.int/wp-content/uploads/2018/06/mono101-007.pdf</a> ) . From this study, estimated t1/2 (error factor 10) = 35d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: vM EC: M exp log Koc=2.7	(SINlist: For Benzophenone carcinogenic effects have been reported. It is potentially persistent and has been found in the environment. Its derivatives are potential endocrine disruptors.)(Pro. S.P._ED)	> 10	DW: max 260 ng/L (D07) GW: - RW: - BF: - SW: max 221 ng/L (S01) WTPE: -
90357-06-5	-	Bicalutamide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 1 ng/L (D05) GW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										RW: - BF: - SW: max 254 ng/L (S06,S01,S06) WTPE: -
85441-61-8	-	Quinapril		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 2 ng/L (D17) GW: - RW: - BF: - SW: max 155 ng/L (S06) WTPE: -
171262-17-2	-	Alachlor OA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 140 ng/L (D02) GW: - RW: - BF: - SW: max 54 ng/L (S01) WTPE: -
83164-33-4	-	Diflufenican		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D02) GW: - RW: - BF: - SW: max 134 ng/L (S01) WTPE: -
94-82-6	-	DB, 2,4- (4-(2,4-dichlorophenoxy)butyric acid)		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D02) GW: - RW: - BF: - SW: max 126 ng/L (S01) WTPE: -
15318-45-3	-	Thiamphenicol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 104 ng/L (D17,D16) GW: - RW: - BF: - SW: max 95 ng/L (S06,S01,S03) WTPE: -
6804-07-5	-	Carbadox		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: - RW: - BF: - SW: max 100 ng/L (S06) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
84-65-1	201-549-0	Anthraquinone	(p)201-549-0; (t1)204-371-1; (t1)269-110-6; (t1)292-602-7; (t1)292-603-2; (t1)292-604-8; (t1)295-278-5; (t3-1)204-371-1; (t3-1)269-110-6; (t3-1)292-602-7; (t3-1)292-603-2; (t3-1)292-604-8; (t3-1)295-278-5	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): EU Method C.4-E (Determination of the "Ready" Biodegradability - Closed Bottle Test); EU Method C.4-E (Determination of the "Ready" Biodegradability - Closed Bottle Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: vM EC: M exp log Koc=3.0	(Carc1ab)(SINlist: Classified CMR according to Annex VI of Regulation 1272/2008)	> 10	DW: max 72 ng/L (D02) GW: - RW: - BF: - SW: max 78 ng/L (S01) WTPE: -
126924-38-7	-	Norfluoxetine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 1 ng/L (D17) GW: - RW: - BF: - SW: max 60 ng/L (S01) WTPE: -
464-49-3	207-355-2	(+)-boman-2-one	(p)207-355-2; (p)244-350-4	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: vM EC: vM exp log Koc=1.2	-	> 10	DW: max 17 ng/L (D03,D02) GW: - RW: - BF: - SW: max 49 ng/L (S01) WTPE: -
1897-45-6	-	chlorthalonil M12		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 45 ng/L (D18) GW: - RW: - BF: - SW: max 7 ng/L (S01) WTPE: -
50563-36-5	-	dimethachlor CGA 369873		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 32 ng/L (D18) GW: - RW: - BF: - SW: max 6 ng/L (S01) WTPE: -
131341-86-1	-	Fludioxonil		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 0 ng/L (D05) GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 25 ng/L (S01) WTPE: -
79660-72-3	-	Fleroxacin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 22 ng/L (D16) GW: - RW: - BF: - SW: max 6 ng/L (S06,S03) WTPE: -
80-08-0	201-248-4	Dapsone		vPvM & PMT	vPvM & PMT	vP: No significant biodegradation in 301D tests. The PBT assessment evaluates the substance to be persistent. Therefore, this substance is assessed to be persistent in water. (Berger et al. 2018)	UBA: vM EC: vM exp log Koc=1.8	(EDC_UnderAssess)(Pro.S.P._ED)	> 10	DW: detected (D22) GW: - RW: - BF: - SW: max 10 ng/L (S06) WTPE: -
914-00-1	-	Methacycline		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 4 ng/L (D16) GW: - RW: - BF: - SW: max 2 ng/L (S06) WTPE: -
537-46-2	-	Methamphetamine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 3 ng/L (D17) GW: - RW: - BF: - SW: max 3 ng/L (S01) WTPE: -
15318-45-3	239-355-3	Thiamphenicol		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 97d	UBA: vM EC: vM min Dow=-1.1 (2b)	Cramer Cl.III	< 10	DW: detected (D16) GW: - RW: - BF: - SW: detected (S03) WTPE: -
83-07-8	-	4-Aminoantipyrine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D21) GW: - RW: - BF: - SW: - WTPE: max 2 253 ng/L (W10,W04,W05,W10)
39405-35-1	-	Kitasamycin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D16) GW: - RW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										BF: - SW: - WTPE: max 40 ng/L (W12)
2058-94-8	-	PFUnDA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 0 ng/L (D05) GW: - RW: - BF: - SW: - WTPE: max 9 ng/L (W01)
307-55-1	-	PFDoDA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 2 ng/L (D05) GW: - RW: - BF: - SW: - WTPE: max 1 ng/L (W01)
754-91-6	-	FOSA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 0 ng/L (D05) GW: - RW: - BF: - SW: - WTPE: max 1 ng/L (W01)
375-92-8	-	PFHpS		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 0 ng/L (D06) GW: - RW: - BF: - SW: - WTPE: max 1 ng/L (W01)
108-20-3	203-560-6	Diisopropyl ether		vPvM	PM	Potential P/vP++: estimated t1/2 (error factor 10) = 59d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: vM EC: M min Dow=1.6 (2a)	Cramer Cl.III	> 10	DW: - GW: max 10 000 ng/L (G06) RW: max 128 ng/L (R05) BF: - SW: - WTPE: -
156-60-5	205-860-2	trans-dichloroethylene		vPvM	PM	Potential P/vP++: estimated t1/2 (error factor 10) = 36d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: M min Dow=1.9 (2a)	Cramer Cl.III	> 10	DW: - GW: max 10 000 ng/L (G06) RW: max 1 200 ng/L (R05) BF: - SW: - WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
96-18-4	202-486-1	1,2,3-trichloropropane		vPvM & PMT	vPvM & PMT	Potential P/vP++: P data for this substance is variable and difficult to conclude; however, its identification in monitoring studies in DW and GW indicates it is persistent enough.	UBA: vM EC: vM exp log Koc=1.9	(SVHC: Carcinogenic (Article 57a)#Toxic for reproduction (Article 57c))(Carc1ab)(Rep1)(DNEL)(SINlist: Classified CMR according to Annex VI of Regulation 1272/2008)	> 10	DW: - GW: max 5 000 ng/L (G06) RW: max 90 ng/L (R05) BF: - SW: - WTPE: -
29385-43-1	249-596-6	Methyl-1H-benzotriazole		vPvM	vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 33d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test); EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test)	UBA: vM EC: vM exp log Koc=1.5	Cramer Cl.III	> 10	DW: - GW: max 3 ng/L (G13) RW: max 127 ng/L (R05) BF: - SW: - WTPE: -
637-92-3	211-309-7	2-ethoxy-2-methylpropane		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 69d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: vM exp log Koc=0.6	Cramer Cl.III	> 10	DW: - GW: detected (G05) RW: max 70 ng/L (R05) BF: - SW: - WTPE: -
-	915-730-3	reaction mass of 1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one and 1-(1,2,3,4,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one and 1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		Not PMT/vPvM	Not PMT/vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 87d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: Not M EC: Not M min Dow=5.9 (2a)	(PBT_UnderAssess)	> 10	DW: - GW: - RW: max 17 ng/L (R03) BF: - SW: max 17 599 ng/L (S01) WTPE: -



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
78-40-0	201-114-5	Triethyl phosphate		vPvM	vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 20d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: vM EC: vM exp log Koc=-0.3	Cramer Cl.III	> 10	DW: - GW: - RW: max 70 ng/L (R05) BF: - SW: max 6 788 ng/L (S01) WTPE: -
75-65-0	200-889-7	2-methylpropan-2-ol	(p)200-889-7; (p)902-882-0; (t1)216-653-1; (t2)201-557-4; (t1-2)201-557-4; (t2-2)216-653-1	vPvM	vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 29d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. EU Method C.4-A (Determination of the "Ready" Biodegradability - Dissolved Organic Carbon (DOC) Die-Away Test); EU Method C.4-A (Determination of the "Ready" Biodegradability - Dissolved Organic Carbon (DOC) Die-Away Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)	UBA: vM EC: vM exp log Koc=-0.3	Cramer Cl.III	> 10	DW: - GW: - RW: max 3 100 ng/L (R05) BF: - SW: max 4 914 ng/L (S01) WTPE: -
93413-62-8	700-516-2	4-[2-(Dimethylamino)-1-(1-hydroxycyclohexyl)ethyl]phenol		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 126d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM min Dow=-0.9 (2c)	(Pro.S.P._ED)	< 10	DW: - GW: - RW: max 22 ng/L (R04) BF: - SW: max 1 953 ng/L (S01,S04) WTPE: -
109-99-9	203-726-8	Tetrahydrofuran	(p)203-726-8;; (s1)237-881-8	Not PMT/vPvM	Not PMT/vPvM	Not P: Ambiguous mostly Not P: EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test) Directive 79/831/EEC Annex V, Methods for the Determination of Ecotoxicity, Part IV, Manometric Respirometry; ISO DIS 9408 (Ultimate Aerobic Biodegradability - Method by Determining the Oxygen Demand in a Closed Respirometer)	UBA: vM EC: vM exp log Koc=1.3	(Carc2)	> 10	DW: - GW: - RW: max 598 ng/L (R05) BF: - SW: max 1 420 ng/L (S01) WTPE: -
2315-67-5	-	4-tert-Octylphenol monoethoxylate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: max 140 ng/L (R05) BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 585 ng/L (S01) WTPE: -
2315-61-9	-	octylphenol diethoxylate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: max 260 ng/L (R01,R05) BF: - SW: max 399 ng/L (S01) WTPE: -
123732-85-4	-	Propachlor-ESA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: max 30 ng/L (R05) BF: - SW: max 270 ng/L (S01) WTPE: -
87-62-7	201-758-7	2,6-xylidine		PMT	PMT	P: No significant biodegradation in 301F tests. 302B tests not reliable. Registrant evaluates this substance to be persistent. Therefore, this substance is assessed to be persistent in water. (Berger et al. 2018)	UBA: vM EC: vM exp log Koc=1.6	(Carc2)	< 10	DW: - GW: - RW: max 30 ng/L (R05) BF: - SW: max 206 ng/L (S01) WTPE: -
95-68-1	202-440-0	2,4-xylidine		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 43d, and consistency across all tested QSARs	UBA: vM EC: vM exp log Koc=1.0	Cramer Cl.III	< 10	DW: - GW: - RW: max 30 ng/L (R05) BF: - SW: max 196 ng/L (S01) WTPE: -
107534-96-3	403-640-2	1-(4-chlorophenyl)-4,4-dimethyl-3-(1,2,4-triazol-1-ylmethyl)pentan-3-ol		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 209d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: M exp log Koc=2.4	(Rep2)	< 10	DW: - GW: - RW: max 40 ng/L (R05) BF: - SW: max 133 ng/L (S01) WTPE: -
1806-26-4	-	octylphenol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: max 130 ng/L (R01) BF: - SW: max 52 ng/L (S01) WTPE: -
51276-47-2	-	Glufosinate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: max 128 ng/L (R05) BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 20 ng/L (S01) WTPE: -
119515-38-7	423-210-8	sec-butyl 2-(2-hydroxyethyl)piperidine-1-carboxylate/Icaridine (Icaridine)		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 31d, and consistency across all tested QSARs	UBA: M EC: Pot. M/vM min Dow=3.3 (2a)	Cramer Cl.III	< 10	DW: - GW: - RW: max 2 ng/L (R03) BF: - SW: max 92 ng/L (S01) WTPE: -
13523-86-9	-	Pindolol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: max 50 ng/L (R05) BF: - SW: max 81 ng/L (S06,S01) WTPE: -
99-87-6	202-796-7	p-cymene	(p)202-796-7; (s1)435-530-5	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: M EC: Not M exp log Koc=3.7	-	> 10	DW: - GW: - RW: max 60 ng/L (R05) BF: - SW: max 64 ng/L (S01) WTPE: -
31431-39-7	-	Mebendazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: max 20 ng/L (R05) BF: - SW: max 14 ng/L (S06) WTPE: -
81-15-2	-	Musk xylene		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: max 1 ng/L (R03) BF: - SW: detected (S03) WTPE: -
1119449-37-4	-	nonyl phenol monoethoxylate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: max 615 ng/L (R01,R03) BF: - SW: - WTPE: max 335 ng/L (W11)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
55589-62-3	259-715-3	6-methyl-1,2,3-oxathiazin-4(3H)-one 2,2-dioxide, potassium salt		PM	PM	P: All biodegradation results in 301A and 302B tests imply no significant biodegradation. Therefore, this substance is assessed to be persistent in water. (Berger et al. 2018)	UBA: vM EC: vM min Dow=-1.9 (2b)	Cramer Cl.III	> 10	DW: - GW: max 260 ng/L (G13) RW: - BF: detected (B04) SW: - WTPE: -
106-46-7	203-400-5	1,4-dichlorobenzene	(p)203-400-5; (t1)204-428-0	Not PMT/vPvM	Not PMT/vPvM	Not P: Ambiguous mostly Not P: OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: vM EC: M exp log Koc=2.4	(Carc2)	> 10	DW: - GW: max 10 000 ng/L (G06) RW: - BF: - SW: max 566 ng/L (S01) WTPE: -
-	TP of: 217-617-8	Hydroxyatrazine	(t3)217-617-8	insufficient data	insufficient data	no conclusion/data: no data	UBA: vM EC: vM min Dow=-1.0 (2b)	-	< 10	DW: - GW: max 32 ng/L (G13) RW: - BF: - SW: max 2 680 ng/L (S01) WTPE: -
138261-41-3	428-040-8	imidacloprid (ISO); 1-(6-chloropyridin-3-ylmethyl)-N-nitroimidazolidin-2-ylidenamine		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 168d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM min Dow=-0.7 (2c)	Cramer Cl.III	< 10	DW: - GW: max 2 ng/L (G13) RW: - BF: - SW: max 1 887 ng/L (S01) WTPE: -
41394-05-2	-	Metamitron		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 90 ng/L (G13) RW: - BF: - SW: max 1 500 ng/L (S01) WTPE: -
2078-54-8	-	Propofol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 1 000 ng/L (G02) RW: - BF: - SW: max 69 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
188425-85-6	-	Boscalid (Nicobifen)		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 1 ng/L (G13) RW: - BF: - SW: max 678 ng/L (S01) WTPE: -
21087-64-9	-	Metribuzin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 4 ng/L (G13) RW: - BF: - SW: max 541 ng/L (S01,S01) WTPE: -
16484-77-8	-	Mecoprop-P		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 240 ng/L (G13) RW: - BF: - SW: max 470 ng/L (S01) WTPE: -
70630-17-0	-	Mefenoxam		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 3 ng/L (G13) RW: - BF: - SW: max 380 ng/L (S01) WTPE: -
121552-61-2	-	Cyprodinil		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 1 ng/L (G13) RW: - BF: - SW: max 330 ng/L (S01) WTPE: -
56392-14-4	-	Metoprolol acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 6 ng/L (G13) RW: - BF: - SW: max 324 ng/L (S01,S03) WTPE: -
142459-58-3	-	Flufenacet		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 28 ng/L (G13) RW: - BF: - SW: max 290 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
103-83-3	203-149-1	Benzyltrimethylamine		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: vM EC: vM exp log Koc=1.1	Cramer Cl.III	> 10	DW: - GW: detected (G08) RW: - BF: - SW: max 150 ng/L (S02) WTPE: -
2163-69-1	-	Cycluron		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 140 ng/L (G13) RW: - BF: - SW: max 5 ng/L (S01) WTPE: -
3337-71-1	-	Asulam		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 54 ng/L (G13) RW: - BF: - SW: max 140 ng/L (S01) WTPE: -
4710-17-2	-	Dichlofluanid metabolite (DMSA)		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 21 ng/L (G13) RW: - BF: - SW: max 140 ng/L (S01) WTPE: -
CC1=C(C(=CC=C1)C)N(C(=O)C(=O)O)C(=O)O	-	Dimethachlor ESA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 120 ng/L (G13) RW: - BF: - SW: max 24 ng/L (S01) WTPE: -
70288-86-7	-	Ivermectine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 100 ng/L (G02) RW: - BF: - SW: max 88 ng/L (S06) WTPE: -
120-12-7	204-371-1	Anthracene	(p)204-371-1; (p)269-110-6; (p)292-602-7; (p)292-603-2; (p)292-604-8; (p)295-278-5	PMT	Not PMT/vPvM	P: On SVHC list - PBT substance	UBA: M EC: Not M exp log Koc=3.9	(SVHC: PBT (Article 57d))(PBT_BroadConses)(Ecotox_PMT2019)(Ecotox_Envirotox)(S	< 10	DW: - GW: detected (G05) RW: - BF: - SW: max 65 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
								INlist: Substance is concluded to be PBT by European Chemicals Bureau PBT Working Group.)		
129-00-0	204-927-3	Pyrene		Not PMT/vPvM	Not PMT/vPvM	vP: on SVHC list - vPvB substance	UBA: Not M EC: Not M min Dow=4.6 (2a)	(SVHC: PBT (Article 57d)#vPvB (Article 57e))(PBT_UnderAssess)(Ecotox_PMT2019)	< 10	DW: - GW: detected (G05) RW: - BF: - SW: max 64 ng/L (S01) WTPE: -
100-90-3	-	N4-acetylsulfamethazine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 57 ng/L (G07,G14) RW: - BF: - SW: detected (S03) WTPE: -
1563-66-2	-	Carbofuran		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: detected (G05) RW: - BF: - SW: max 45 ng/L (S01) WTPE: -
111991-09-4	-	Nicosulfuron		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 6 ng/L (G13) RW: - BF: - SW: max 44 ng/L (S01) WTPE: -
77732-09-3	-	Oxadixyl		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 42 ng/L (G13) RW: - BF: - SW: max 1 ng/L (S01) WTPE: -
114311-32-9	-	Imazamox		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 1 ng/L (G13) RW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										BF: - SW: max 36 ng/L (S01) WTPE: -
83-32-9	201-469-6	Acenaphthene	(p)201-469-6; (p)292-605-3	PMT	Not PMT/vPvM	P: measured max t1/2.max(d): w=n.d.; s=134(P); sed=n.d.	UBA: M EC: Not M exp log Koc=3.4	(Carc1ab)(PBT_UnderAssess)(SINlist: Classified CMR according to Annex VI of Regulation 1272/2008. (Might not apply when contaminants are below legal thresholds and/or full refining history is known))	< 10	DW: - GW: detected (G05) RW: - BF: - SW: max 35 ng/L (S01) WTPE: -
7287-19-6	-	Prometryn		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 22 ng/L (G13,G05) RW: - BF: - SW: max 31 ng/L (S01,S01) WTPE: -
52722-86-8	258-132-1	4-hydroxy-2,2,6,6-tetra methylpiperidine-1-ethanol		PM	PM	P: No significant biodegradation in 301B tests. The PBT assessment evaluates the substance to be persistent. Therefore, this substance is assessed to be persistent in water. (Berger et al. 2018)	UBA: vM EC: vM min Dow=-3.3 (2a)	Cramer Cl.III	> 10	DW: - GW: max 25 ng/L (G13) RW: - BF: - SW: detected (S02) WTPE: -
67564-91-4	-	Fenpropimorph		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: detected (G05) RW: - BF: - SW: max 15 ng/L (S01) WTPE: -
34123-57-4	-	Isoproturon-monodemethyl		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 0 ng/L (G13) RW: - BF: - SW: max 14 ng/L (S01) WTPE: -



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
60-57-1	-	Dieldrin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: detected (G05) RW: - BF: - SW: max 13 ng/L (S01) WTPE: -
149289-30-5	-	N-Desmethylvenlafaxine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 12 ng/L (G13) RW: - BF: - SW: max 3 ng/L (S01) WTPE: -
1746-81-2	-	Monolinuron		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 9 ng/L (G13) RW: - BF: - SW: max 8 ng/L (S01) WTPE: -
120923-37-7	-	Amidosulfuron		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 2 ng/L (G13) RW: - BF: - SW: max 4 ng/L (S01) WTPE: -
93-72-1	-	TP, 2,4,5- (Fenoprop)		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: detected (G05) RW: - BF: - SW: max 4 ng/L (S01) WTPE: -
19395-41-6	-	Ritalinic acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 3 ng/L (G13) RW: - BF: - SW: max 3 ng/L (S01) WTPE: -
104-23-4	203-187-9	4'-aminoazobenzene-4-sulphonic acid		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: P data for this substance is variable and difficult to conclude (see e.g. Berger et al. (2018)); however, its identification in monitoring studies in monitoring studies	UBA: vM EC: M exp log Koc=2.4	(Pro.S.P._ED)	< 10	DW: - GW: detected (G08-SW?) RW: - BF: - SW: detected (S02) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						(Schulze et al. 2019) indicates it is persistent enough to be considered potentially P/vP				
140-31-8	205-411-0	2-piperazin-1-ylethylamine		Not PMT/vPvM	Not PMT/vPvM	P: All biodegradation results in 301D and F and 302B tests imply no significant biodegradation. Therefore, this substance is assessed to be persistent in water. (Berger et al. 2018)	UBA: Not M EC: Not M exp log Koc=4.6	Cramer Cl.III	> 10	DW: - GW: detected (G08-SW?) RW: - BF: - SW: detected (S02) WTPE: -
1561-92-8	216-341-5	Sodium 2-methylprop-2-ene-1-sulphonate		PM	PM	P: No significant biodegradation in a 301A analogue test with preadaptation. Due to lack of other information the substance was assessed by PBT assessment. Therefore, this substance is assessed to be persistent in water. (Berger et al. 2018)	UBA: vM EC: vM exp log Koc=1.3	Cramer Cl.III	> 10	DW: - GW: detected (G08) RW: - BF: - SW: detected (S02) WTPE: -
23386-52-9	245-629-3	Sodium 1,4-dicyclohexyl sulphonatosuccinate		PM	PM	P: All biodegradation results in 301B, D and E and 302B tests imply no significant biodegradation. Therefore, this substance is assessed to be persistent in water. (Berger et al. 2018)	UBA: vM EC: vM min Dow=-1.5 (2b)	Cramer Cl.III	> 10	DW: - GW: detected (G08) RW: - BF: - SW: detected (S02) WTPE: -
280-57-9	205-999-9	1,4-diazabicyclooctane		PM	Not PMT/vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 57d, found in several water samples in Schulze et al. (2019) and consistent indications of P across tested QSARs	UBA: M EC: Not M exp log Koc=3.4	Cramer Cl.III	> 10	DW: - GW: detected (G08-SW?) RW: - BF: - SW: detected (S02) WTPE: -
2855-13-2	220-666-8	3-aminomethyl-3,5,5-trimethylcyclohexylamine	(p)220-666-8; (s1)289-348-4; (p)700-128-3; (s2)614-657-1	PMT	PMT	P: No significant biodegradation in 301A tests. The PBT assessment evaluates the substance to be persistent. Therefore, this substance is assessed to be persistent in water. (Berger et al. 2018)	UBA: vM EC: vM min Dow=-6.6 (2a)	(Pro.S.P._ED)	> 10	DW: - GW: detected (G08-SW?) RW: - BF: - SW: detected (S02) WTPE: -
3039-83-6	221-242-5	Sodium ethylenesulphonate		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (inherently biodeg): OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test); OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)	UBA: vM EC: vM min Dow=-1.0 (2b)	Cramer Cl.III	> 10	DW: - GW: detected (G08-SW?) RW: - BF: - SW: detected (S02) WTPE: -
51263-08-2	257-093-8	Sodium hydrogen [6R-(6α,7β)]-3-(acetoxymethyl)-7-[(5-	(s1)257-093-8; (s1)257-182-1	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (inherently biodeg): EU Method C.4-D (Determination of the "Ready"	UBA: vM EC: vM	(STOTRE_Broad Consensus)	< 10	DW: - GW: detected (G08-SW?) RW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
		amino-5-carboxylato-1-oxopentylamino]-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylate				Biodegradability - Manometric Respirometry Test) 30th May 2008; EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test) 30th May 2008; OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test) adopted 17th July 1992; OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test) adopted 17th July 1992	min Dow=-3.7 (2c)			BF: - SW: detected (S02) WTPE: -
5205-93-6	226-002-3	N-[3-(dimethylamino)propyl]methacrylamide		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test) adopted 17th July 1992.	UBA: vM EC: vM min Dow=-3.1 (2c)	Cramer Cl.III	> 10	DW: - GW: detected (G08) RW: - BF: - SW: detected (S02) WTPE: -
542-02-9	208-796-3	6-methyl-1,3,5-triazine-2,4-diyldiamine		vPvM	vPvM	vP: No significant biodegradation in an enhanced 301E test. PBT assessment evaluates this substance to be persistent. Therefore, this substance is assessed to be persistent in water. (Berger et al. 2018)	UBA: vM EC: vM min Dow=-2.2 (2c)	Cramer Cl.III	< 10	DW: - GW: detected (G08) RW: - BF: - SW: detected (S02) WTPE: -
83-46-5	-	Beta-Sitosterol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: max 2 100 ng/L (B03) SW: max 9 070 ng/L (S01) WTPE: -
57-88-5	200-353-2	Cholesterol		Not PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 106d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: Not M EC: Not M min Dow=6.5 (2a)	(Pro.S.P._ED)	> 10	DW: - GW: - RW: - BF: max 680 ng/L (B03) SW: max 3 170 ng/L (S01) WTPE: -
8047-99-2	232-465-2	N-ethyl-o(or p)-toluenesulphamide		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 38d	UBA: vM EC: M min Dow=1.8 (2a)	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: detected (B04) SW: max 220 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
-	TP of: 206-354-4	Diuron-metabolite	(t2)206-354-4	insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 82d	UBA: vM EC: M min Dow=2.3 (2a)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: detected (B04) SW: max 205 ng/L (S01) WTPE: -
14838-15-4	-	Norephedrine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: max 59 ng/L (W12)
83881-51-0	-	Cetirizine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 320 ng/L (S06,S01) WTPE: max 3 596 000 ng/L (W12)
599-79-1	-	Sulfasalazine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 168 ng/L (S06) WTPE: max 2 185 000 ng/L (W12)
73590-58-6	615-996-8	6-methoxy-2-[[[4-methoxy-3,5-dimethylpyridin-2-yl)methyl]sulfinyl]-1H-benzimidazole		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 106d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: M EC: Pot. M/vM min Dow=1.4 (2c)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 222 ng/L (S06,S03) WTPE: max 1 324 000 ng/L (W12,W05,W10)
133040-01-4	-	Eprosartan		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 280 ng/L (S06) WTPE: max 1 044 000 ng/L (W12,W08,W12)
59729-33-8	261-891-1	Citalopram		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 866d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: M exp log Koc=2.4	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 274 ng/L (S06,S01) WTPE: max 790 228 ng/L (W12,W08)
1404-90-6	-	Vancomycin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 90 ng/L (S06,S03) WTPE: max 500 000 ng/L (W12)
35689-59-9	252-677-9	Benzoic acid, 2-hydroxy-5-sulfo-, compd. with [4S-(4 $\alpha$ ,4 $\alpha$ ,5 $\alpha$ ,5 $\alpha$ ,6 $\alpha$ ,12 $\alpha$ )]-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-2-naphthacenecarboxamide	(s1)252-677-9; (s1)940-053-5	Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 95d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM min Dow=-5.6 (2b)	(Rep_BroadConsensus)	< 10	DW: - GW: - RW: - BF: - SW: max 271 664 ng/L (S06,S01) WTPE: max 43 709 ng/L (W04,W02,W09)
2013-58-3	-	Meclocycline		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 167 500 ng/L (S06) WTPE: max 370 ng/L (W12)
52485-79-7	-	Buprenorphine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 33 000 ng/L (S06,S01) WTPE: max 64 000 ng/L (W12,W08)
50-02-2	-	Dexamethasone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 58 084 ng/L (S06,S03) WTPE: max 2 ng/L (W12)
57-09-0	200-311-3	Cetrimonium bromide	(s1)200-311-3; (s1)203-928-6; (s1)205-324-8; (s1)265-352-1	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test);	UBA: Not M EC: Not M exp log Koc=5.8	(Ecotox_PMT2019)	> 10	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)				SW: max 1 600 ng/L (S06,S01) WTPE: max 31 000 ng/L (W12)
127-33-3	-	Demeclocycline		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 23 500 ng/L (S06) WTPE: max 2 700 ng/L (W12)
606-17-7	-	Iodipamide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 530 ng/L (S06) WTPE: max 20 200 ng/L (W12)
51803-78-2	-	Nimesulide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 150 ng/L (S06) WTPE: max 9 731 ng/L (W12)
51481-61-9	-	Cimetidine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 338 ng/L (S06,S01,S03) WTPE: max 9 395 ng/L (W12)
100986-85-4	-	Levofloxacin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 990 ng/L (S06) WTPE: max 8 800 ng/L (W12)
2276-90-6	218-897-4	Iotalamic acid		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM min Dow=-0.8 (2b)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 190 ng/L (S06) WTPE: max 8 700 ng/L (W12,W04)
30516-87-1	-	Zidovudine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 7 684 ng/L (S06) WTPE: max 513 ng/L (W12)
66-79-5	-	Oxacillin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 7 571 ng/L (S06) WTPE: max 115 ng/L (W12)
169590-42-5	-	Celecoxib		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 6 820 ng/L (S01) WTPE: max 66 ng/L (W12)
99-76-3	202-785-7	Methyl 4-hydroxybenzoate	(s1)225-714-1; (p)202-785-7	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: vM EC: vM min Dow=1.1 (2a)	(EDC_UnderAssess)(Pro.S.P._ED )	> 10	DW: - GW: - RW: - BF: - SW: max 920 ng/L (S06,S01) WTPE: max 5 810 ng/L (W12)
134678-17-4	-	Lamivudine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 5 428 ng/L (S06,S01) WTPE: max 3 985 ng/L (W12)
77-26-9	-	Butalbital		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 5 300 ng/L (S06) WTPE: max 130 ng/L (W12)
196618-13-0	-	Oseltamivir		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 4 600 ng/L (S06,S01) WTPE: max 5 000 ng/L (W12)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
129618-40-2	-	Nevirapine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 4 859 ng/L (S06,S01) WTPE: max 1 357 ng/L (W12)
76639-94-6	-	Florfenicol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 913 ng/L (S06) WTPE: max 4 610 ng/L (W12)
125-29-1	-	Hydrocodone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 4 150 ng/L (S06,S01,S06) WTPE: max 400 ng/L (W12)
83799-24-0	801-893-7	2-[4-(1-hydroxy-4-[4-[hydroxy(diphenyl)methyl]piperidin-1-yl]butyl)phenyl]-2-methylpropanoic acid		Potential PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 195d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: Pot. M/vM EC: Not M min Dow=5.1 (2b)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 3 894 ng/L (S06,S01) WTPE: max 1 287 ng/L (W08,W12)
112811-59-3	-	Gatifloxacin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 480 ng/L (S06) WTPE: max 3 700 ng/L (W12)
437-38-7	-	Fentanyl		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 4 ng/L (S06) WTPE: max 3 700 ng/L (W12,W08)
89-57-6	201-919-1	5-aminosalicylic acid	(s1)939-617-3; (p)201-919-1; (s1)613-105-7; (s1)616-280-8	insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 20d	UBA: vM EC: vM min Dow=-2.3 (2b)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 190 ng/L (S06) WTPE: max 3 072 ng/L (W12)



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
709-98-8	-	Propanil		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 3 010 ng/L (S01) WTPE: max 36 ng/L (W06)
23282-55-5	-	Sulfachloropyridazine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 3 000 ng/L (S06) WTPE: max 149 ng/L (W12)
3778-73-2	-	Ifosfamide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 180 ng/L (S06) WTPE: max 3 000 ng/L (W12)
50-18-0	-	Cyclophosphamide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 100 ng/L (S06) WTPE: max 3 000 ng/L (W12)
53179-11-6	258-416-5	Loperamide		vPvM	PM	vP: estimated t1/2 (error factor 10) = 892d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. EU Method C.4-C (Determination of the "Ready" Biodegradability - Carbon Dioxide Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); EU Method C.4-C (Determination of the "Ready" Biodegradability - Carbon Dioxide Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)	UBA: vM EC: M exp log Koc=2.7	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 4 ng/L (S06) WTPE: max 2 409 ng/L (W08)
94-13-3	202-307-7	Propyl 4-hydroxybenzoate	(s1)252-488-1; (p)202-307-7	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: vM EC: M min Dow=1.9 (2a)	(EDC_UnderAss ess)(SINlist: Propylparaben is an endocrine disruptor with estrogenic and	> 10	DW: - GW: - RW: - BF: - SW: max 1 255 ng/L (S01,S06,S03) WTPE: max 2 060 ng/L (W12)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
								antiandrogen activity, affecting sperm function and prenatal development among others. The substance has been detected in biomonitoring studies and human urine and milk. It is categorized as an endocrine disruptor in the EU Commission Database.)(Pro. S.P. ED)		
55268-75-2	-	Cefuroxime		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 700 ng/L (S06) WTPE: max 1 957 ng/L (W12)
53994-73-3	-	Cefaclor		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 200 ng/L (S06) WTPE: max 1 800 ng/L (W12)
79902-63-9	-	Simvastatin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 8 ng/L (S06) WTPE: max 1 738 ng/L (W12)
61869-08-7	-	Paroxetine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 225 ng/L (S06,S01) WTPE: max 1 240 ng/L (W05,W12)
52-53-9	-	Verapamil		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 220 ng/L (S01,S01) WTPE: max 165 ng/L (W08,W12)
66258-76-2	-	Piperacillin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 8 ng/L (S06) WTPE: max 1 205 ng/L (W12)
90-82-4	-	Pseudoephedrine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 200 ng/L (S06) WTPE: max 48 ng/L (W12)
120-47-8	204-399-4	Ethyl 4-hydroxybenzoate	(s1)252-487-6; (p)204-399-4; (p)232-577-1	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: vM EC: vM min Dow=1.4 (2a)	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 294 ng/L (S06,S01) WTPE: max 1 130 ng/L (W12)
75847-73-3	-	Enalapril		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 113 ng/L (S06) WTPE: max 1 041 ng/L (W12,W05)
18323-44-9	-	Clindamycin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 503 ng/L (S06) WTPE: max 1 000 ng/L (W12,W08,W02)
396-01-0	-	Triamterene		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										BF: - SW: max 182 ng/L (S06,S01) WTPE: max 1 000 ng/L (W12)
113-45-1	-	methylphenidate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 997 ng/L (S01) WTPE: max 7 ng/L (W12)
287714-41-4	-	Rosuvastatin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 61 ng/L (S06) WTPE: max 979 ng/L (W08,W12)
72-33-3	-	Mestranol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 150 ng/L (S06) WTPE: max 960 ng/L (W12)
13311-84-7	-	Flutamide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 935 ng/L (S06) WTPE: max 64 ng/L (W12)
108050-54-0	-	Tilmicosin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 227 ng/L (S06) WTPE: max 932 ng/L (W08,W12)
73573-88-3	700-442-0	(1S,7S,8S,8aR)-8-[[2-[(2R,4R)-4-hydroxy-6-oxotetrahydro-2H-pyran-2-yl]ethyl]-7-methyl-1,2,3,7,8,8a-hexahydronaphthalen-1-yl(2S)-2-methylbutanoate		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 25d	UBA: M EC: Pot. M/vM min Dow=3.5 (2a)	(Rep_BroadConsensus)	< 10	DW: - GW: - RW: - BF: - SW: max 81 ng/L (S06) WTPE: max 850 ng/L (W12)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
53-41-8	-	Androsterone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 616 ng/L (S01,S06) WTPE: max 840 ng/L (W12)
63-25-2	-	Carbaryl		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 257 ng/L (S01) WTPE: max 814 ng/L (W08)
87848-99-5	-	Acrivastine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 6 ng/L (S06) WTPE: max 781 ng/L (W12)
51-64-9	200-112-1	Dexamphetamine	(p)200-112-1; (p)205-850-8; (p)206-096-2	insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 33d	UBA: vM EC: vM exp log Koc=0.9	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 67 ng/L (S01,S06) WTPE: max 739 ng/L (W12)
61-72-3	-	Cloxacillin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 10 ng/L (S06,S03) WTPE: max 700 ng/L (W12)
1639-60-7	-	Dextropropoxyphene		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 682 ng/L (S06) WTPE: max 585 ng/L (W12)
24219-97-4	-	Mianserin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 7 ng/L (S06) WTPE: max 623 ng/L (W08,W12)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
101-20-2	202-924-1	Triclocarban		PM	Not PMT/vPvM	vP: measured max t1/2.max(d): w=n.d.; s=231(vP); sed=500(vP)	UBA: M EC: Not M exp log Koc=3.7	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 575 ng/L (S06,S01,S03) WTPE: max 617 ng/L (W12)
51333-22-3	-	Budesonide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 4 ng/L (S06) WTPE: max 611 ng/L (W12)
-	927-786-6	3-[[2-[[3-(acetylmethylamino)-2,4,6-triiodo-5-[[methylamino]carbonyl]benzoyl]amino]acetyl]amino]-5-[[2-hydroxyethyl]amino]carbonyl]-2,4,6-triiodobenzoic acid triethylammonium salt		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM min Dow=0.2 (2b)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 39 ng/L (S06) WTPE: max 580 ng/L (W12)
125-28-0	-	dihydrocodeine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 97 ng/L (S06,S01) WTPE: max 569 ng/L (W12)
54143-55-4	685-650-9	N-[(piperidin-2-yl)methyl]-2,5-bis(2,2,2-trifluoroethoxy)benzamide		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 637d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM exp log Koc=1.6	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 130 ng/L (S06) WTPE: max 553 ng/L (W08)
139755-83-2	604-158-7	5-[2-ethoxy-5-[[4-methylpiperazin-1-yl]sulfonyl]phenyl]-1-methyl-3-propyl-1H,6H,7H-pyrazolo[4,3-d]pyrimidin-7-one	(p)604-158-7; (p)918-045-8	insufficient data	insufficient data	no conclusion/data: no data	UBA: vM EC: vM min Dow=-0.6 (2c)	-	< 10	DW: - GW: - RW: - BF: - SW: max 29 ng/L (S06) WTPE: max 517 ng/L (W12)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
122-16-7	-	Sulfanitran		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 127 ng/L (S06) WTPE: max 512 ng/L (W12)
846-50-4	-	Temazepam		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 219 ng/L (S01,S01) WTPE: max 508 ng/L (W12)
83-98-7	201-509-2	Orphenadrine		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 134d	UBA: vM EC: M exp log Koc=2.3	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 28 ng/L (S06) WTPE: max 467 ng/L (W08)
1867-66-9	217-484-6	Ketamine hydrochloride		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 66d	UBA: vM EC: M min Dow=0.4 (2c)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 415 ng/L (S06,S01) WTPE: max 349 ng/L (W12)
55134-13-9	-	Narasin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 38 ng/L (S06) WTPE: max 412 ng/L (W12)
61337-67-5	-	Mirtazapine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 210 ng/L (S06) WTPE: max 410 ng/L (W12)
22832-87-7	245-256-6	Miconazole nitrate		Not PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 839d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: Not M EC: Not M exp log Koc=4.5	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 380 ng/L (S06,S01) WTPE: max 148 ng/L (W08,W12)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
14769-73-4	-	Levamisole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 9 ng/L (S06) WTPE: max 340 ng/L (W08)
37594-64-2	807-571-2	1-[(2-Chlorophenyl)(diphenyl)methyl]-1H-imidazole nitrate		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 225d, and BOWIN screen tool as recommended in the PBT guideline	UBA: Pot. M/vM EC: Pot. M/vM min Dow=2.3 (2c)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 340 ng/L (S06,S01) WTPE: max 150 ng/L (W12,W08)
103577-45-3	-	Lansoprazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 96 ng/L (S06) WTPE: max 337 ng/L (W12)
28981-97-7	-	Alprazolam		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 118 ng/L (S01,S06) WTPE: max 330 ng/L (W08)
79794-75-5	935-907-9	ethyl 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)piperidine-1-carboxylate		Not PMT/vPvM	Not PMT/vPvM	P: ECHA PBT Broad consensus	UBA: Not M EC: Not M min Dow=5.4 (2c)	(PBT_BroadCon ses)	< 10	DW: - GW: - RW: - BF: - SW: max 202 ng/L (S06,S01) WTPE: max 330 ng/L (W12)
102767-28-2	-	Levetiracetam		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 95 ng/L (S06) WTPE: max 308 ng/L (W12)
83915-83-7	-	Lisinopril		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 245 ng/L (S06) WTPE: max 306 ng/L (W12)



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
113-53-1	-	Dosulepin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 32 ng/L (S06) WTPE: max 299 ng/L (W12)
94-26-8	202-318-7	Butyl 4-hydroxybenzoate		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test) 1992	UBA: vM EC: M exp log Koc=2.6	(EDC_UnderAssess)(SINlist: Butylparaben is an endocrine disruptor with estrogenic and antiandrogen activity, affecting sperm function and reproductive organs among others. The substance has been detected in human urine and indoor air. It is categorized as an endocrine disruptor in the EU Commission Database.)	> 10	DW: - GW: - RW: - BF: - SW: max 181 ng/L (S01,S06,S03) WTPE: max 290 ng/L (W12)
50-23-7	200-020-1	Hydrocortisone		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test); OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)	UBA: vM EC: vM min Dow=0.6 (2a)	(Pro.S.P._ED)	< 10	DW: - GW: - RW: - BF: - SW: max 287 ng/L (S01,S03) WTPE: max 64 ng/L (W12)
34911-55-2	-	Bupropion		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 160 ng/L (S01,S06) WTPE: max 264 ng/L (W12,W08)
37148-27-9	-	Clenbuterol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										BF: - SW: max 110 ng/L (S06) WTPE: max 210 ng/L (W12)
474-86-2	-	Equilin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 6 ng/L (S06) WTPE: max 207 ng/L (W12)
81403-80-7	617-230-8	N-[3-[(4-amino-6,7-dimethoxyquinazolin-2-yl)-methylamino]propyl]oxolane-2-carboxamide		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 179d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM min Dow=-0.7 (2c)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 33 ng/L (S06) WTPE: max 205 ng/L (W08)
1668-19-5	-	Doxepin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 2 ng/L (S06) WTPE: max 190 ng/L (W12)
102625-70-7	600-331-6	5-(difluoromethoxy)-2-[(3,4-dimethoxypyridin-2-yl)methanesulfinyl]-1H-1,3-benzodiazole		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 141d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM min Dow=0.6 (2a)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 117 ng/L (S06) WTPE: max 180 ng/L (W12,W05)
132539-06-1	-	Olanzapine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 6 ng/L (S06) WTPE: max 180 ng/L (W05,W12)
42200-33-9	-	Nadolol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 180 ng/L (S06,S01) WTPE: max 140 ng/L (W12)
78-44-4	-	Carisoprodol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										BF: - SW: max 156 ng/L (S06,S01) WTPE: max 129 ng/L (W12)
26839-75-8	-	Timolol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 68 ng/L (S06) WTPE: max 155 ng/L (W12)
53003-10-4	-	Salinomycin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 150 ng/L (S06,S01,S03) WTPE: max 130 ng/L (W12)
50-33-9	-	Phenylbutazone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 149 ng/L (S06) WTPE: max 60 ng/L (W12)
18683-91-5	242-500-3	Ambroxol		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 148d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM min Dow=-0.6 (2c)	(Pro.S.P._ED)	< 10	DW: - GW: - RW: - BF: - SW: max 130 ng/L (S06) WTPE: max 130 ng/L (W12)
56-53-1	-	Diethylstilbestrol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 125 ng/L (S06) WTPE: max 11 ng/L (W12)
135062-02-1	-	Repaglinide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 54 ng/L (S06) WTPE: max 123 ng/L (W08)
65277-42-1	-	Ketoconazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										BF: - SW: max 26 ng/L (S01) WTPE: max 120 ng/L (W12)
99-66-1	202-777-3	2-propylvaleric acid	(s1)213-961-8; (p)202-777-3	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: vM EC: vM min Dow=-2.8 (2a)	(Rep_BroadConsensus)	< 10	DW: - GW: - RW: - BF: - SW: max 19 ng/L (S06) WTPE: max 117 ng/L (W12)
644-62-2	-	Meclofenamic acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 115 ng/L (S06,S03) WTPE: max 90 ng/L (W12)
637-07-0	-	Clofibrate ethyl		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 5 ng/L (S06) WTPE: max 110 ng/L (W12)
84-97-9	201-578-9	10-[3-(4-methyl-1-piperazinyl)propyl]-10H-phenothiazine		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 780d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: M min Dow=-0.1 (2c)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 8 ng/L (S06) WTPE: max 99 ng/L (W12)
68-88-2	-	Hydroxyzine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 5 ng/L (S06) WTPE: max 96 ng/L (W08)
21829-25-4	-	Nifedipine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 12 ng/L (S06) WTPE: max 89 ng/L (W12)
60-87-7	200-489-2	Promethazine		Potential PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 294d, and	UBA: M EC: Not M exp log Koc=3.8	Cramer Cl.III	< 10	DW: - GW: - RW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						BIOWIN screen tool as recommended in the PBT guideline				BF: - SW: max 11 ng/L (S03) WTPE: max 86 ng/L (W12)
520-85-4	-	Medroxyprogesterone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 80 ng/L (S06,S01) WTPE: max 15 ng/L (W12)
2709-56-0	-	Flupentixol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 12 ng/L (S06) WTPE: max 79 ng/L (W08)
76-42-6	-	Oxycodone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 76 ng/L (S01,S06) WTPE: max 61 ng/L (W12)
938-73-8	-	Ethenzamide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 76 ng/L (S06) WTPE: max 2 ng/L (W12)
95058-81-4	-	Gemcitabine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 2 ng/L (S06) WTPE: max 76 ng/L (W12)
83366-66-9	-	Nefazodone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 ng/L (S06) WTPE: max 70 ng/L (W12)
116539-59-4	-	Duloxetine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										BF: - SW: max 18 ng/L (S01) WTPE: max 63 ng/L (W08)
13392-18-2	680-817-2	5-(1-Hydroxy-2-[[1-(4-hydroxyphenyl)-2-propanyl]amino]ethyl)-1,3-benzenediol		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 64d	UBA: vM EC: vM min Dow=-0.8 (2c)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 61 ng/L (S06) WTPE: max 60 ng/L (W12)
569-65-3	-	Meclozine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 59 ng/L (S06) WTPE: max 15 ng/L (W12)
144-11-6	205-614-4	Trihexyphenidyl		Potential PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 176d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: M EC: Not M exp log Koc=3.8	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 3 ng/L (S06) WTPE: max 58 ng/L (W12)
73-48-3	-	Bendroflumenthiazide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 15 ng/L (S06) WTPE: max 58 ng/L (W12)
59-40-5	-	Sulfaquinoxaline		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 57 ng/L (S06,S03) WTPE: max 35 ng/L (W12)
72-69-5	-	Nortriptyline		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 19 ng/L (S06) WTPE: max 54 ng/L (W12)
303-49-1	206-144-2	Clomipramine	(p)206-144-2; (s1)612-945-1	Not PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 567d, and	UBA: Not M EC: Not M exp log Koc=4.1	Cramer Cl.III	< 10	DW: - GW: - RW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						BIOWIN screen tool as recommended in the PBT guideline				BF: - SW: max 2 ng/L (S01) WTPE: max 49 ng/L (W12,W08)
98319-26-7	-	Finasteride		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 42 ng/L (S06) WTPE: max 20 ng/L (W12)
5630-53-5	-	Tibolone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 5 ng/L (S06) WTPE: max 39 ng/L (W12)
152-62-5	-	Dydrogesterone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 5 ng/L (S06) WTPE: max 39 ng/L (W12)
514-65-8	-	Biperiden		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 6 ng/L (S06) WTPE: max 38 ng/L (W12)
21593-23-7	244-466-5	Cefapirin		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 31d	UBA: vM EC: vM min Dow=-4.5 (2b)	(STOTRE_Broad Consensus)	< 10	DW: - GW: - RW: - BF: - SW: max 8 ng/L (S06) WTPE: max 36 ng/L (W12)
127-71-9	-	Sulfabenza mide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 15 ng/L (S06) WTPE: max 30 ng/L (W12)
88768-40-5	-	Cilazapril		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										BF: - SW: max 4 ng/L (S06) WTPE: max 28 ng/L (W12)
139110-80-8	-	Zanamivir		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 6 ng/L (S06) WTPE: max 28 ng/L (W12)
19794-93-5	243-317-1	Trazodone		insufficient data	insufficient data	no conclusion/data: no data	UBA: M EC: Not M exp log Koc=3.0	-	< 10	DW: - GW: - RW: - BF: - SW: max 28 ng/L (S06) WTPE: max 6 ng/L (W12)
115550-35-1	-	Marbofloxacin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 22 ng/L (S06,S03) WTPE: max 7 ng/L (W12)
15574-96-6	-	Pizotifen		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 ng/L (S06) WTPE: max 22 ng/L (W12)
51481-65-3	-	Mezlocillin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 12 ng/L (S06) WTPE: max 20 ng/L (W12)
64228-79-1	-	Atracurium		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 10 ng/L (S06) WTPE: max 19 ng/L (W12)
54739-18-3	-	Fluvoxamine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: -



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										BF: - SW: max 6 ng/L (S06) WTPE: max 19 ng/L (W12)
75330-75-5	-	Lovastatin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 18 ng/L (S06) WTPE: max 4 ng/L (W12)
71-58-9	-	Medroxyprogesterone acetate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 5 ng/L (S01) WTPE: max 16 ng/L (W12)
15686-51-8	-	Clemastine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 ng/L (S06) WTPE: max 15 ng/L (W12)
69-23-8	-	Fluphenazine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 5 ng/L (S06) WTPE: max 14 ng/L (W12)
83-43-2	-	Methylprednisolone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 11 ng/L (S06,S03) WTPE: max 3 ng/L (W12)
438-67-5	-	Estrone-3-sulfate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 10 ng/L (S01,S06) WTPE: max 9 ng/L (W12)
67392-87-4	-	Drospirenone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										BF: - SW: max 10 ng/L (S06) WTPE: max 10 ng/L (W12)
427-51-0	-	Cyproterone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 3 ng/L (S06) WTPE: max 9 ng/L (W12)
113617-63-3	-	Orbifloxacin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 3 ng/L (S06) WTPE: max 9 ng/L (W12)
3562-63-8	-	Megestrol acetate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 ng/L (S06) WTPE: max 8 ng/L (W12)
71125-39-8	-	Meloxicam		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 2 ng/L (S06) WTPE: max 5 ng/L (W12)
835-31-4	212-641-5	Naphazoline		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 43d	UBA: vM EC: vM exp log Koc=1.9	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 1 ng/L (S06) WTPE: max 2 ng/L (W12)
57-67-0	200-345-9	Sulfaguanidine		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 90d	UBA: vM EC: vM exp log Koc=-0.9	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: detected (S03) WTPE: max 2 ng/L (W12)
1491-59-4	216-079-1	Oxymetazoline		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 92d, and	UBA: vM EC: vM exp log Koc=1.8	Cramer Cl.III	< 10	DW: - GW: - RW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						BIOWIN screen tool as recommended in the PBT guideline				BF: - SW: max 1 ng/L (S06) WTPE: max 1 ng/L (W12)
481-96-9	-	Estradiol-3-sulfate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 ng/L (S06) WTPE: max 1 ng/L (W12)
1861-32-1	-	DCPA mono/di-acid degradate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 190 000 ng/L (D02) GW: - RW: - BF: - SW: - WTPE: -
98-95-3	202-716-0	Nitrobenzene		vPvM & PMT	vPvM & PMT	Potential P/vP++: biodegradation screening tests give conflicting results, but this is found in monitoring studies	UBA: vM EC: vM exp log Koc=1.7	(SVHC: Toxic for reproduction (Article 57c))(Carc2)(Rep1)(EDC_Under Assess)(SINlist: Classified CMR according to Annex VI of Regulation 1272/2008)	< 10	DW: max 100 000 ng/L (D02) GW: - RW: - BF: - SW: - WTPE: -
501-52-0	207-924-5	3-phenylpropionic acid		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 10d	UBA: M EC: Not M exp log Koc=3.3	-	< 10	DW: max 20 100 ng/L (D07) GW: - RW: - BF: - SW: - WTPE: -
-	903-816-3	Reaction mass of 1,3-dichloropropene and 2-chloropropane and 2-chloropropene and 3-chloropropene		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 37d, and consistency across all tested QSARs	UBA: vM EC: M min Dow=2.3 (2a)	Cramer Cl.III	< 10	DW: max 11 140 ng/L (D02) GW: - RW: - BF: - SW: - WTPE: -
61566-34-5	-	ibuprofen methyl ester		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 4 950 ng/L (D07) GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: - WTPE: -
79-43-6	201-207-0	Dichloroacetic acid		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: vM EC: vM exp log Koc=0.4	(Rep_BroadConsensus)	> 10	DW: max 4 500 ng/L (D15) GW: - RW: - BF: - SW: - WTPE: -
10061-01-5	233-195-8	(Z)-1,3-dichloropropene		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 37d, and consistency across all tested QSARs	UBA: vM EC: vM exp log Koc=1.6	Cramer Cl.III	< 10	DW: max 3 910 ng/L (D02) GW: - RW: - BF: - SW: - WTPE: -
542-75-6	208-826-5	1,3-dichloropropene	(p)208-826-5; (p)431-460-4	Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 37d, and consistency across all tested QSARs	UBA: vM EC: vM exp log Koc=1.6	(Ecotox_Envirotox)	< 10	DW: max 3 910 ng/L (D02) GW: - RW: - BF: - SW: - WTPE: -
121-82-4	204-500-1	Perhydro-1,3,5-trinitro-1,3,5-triazine		vPvM	PM	Potential P/vP++: estimated t1/2 (error factor 10) = 72d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: M exp log Koc=2.0	Cramer Cl.III	> 10	DW: max 1 100 ng/L (D02) GW: - RW: - BF: - SW: - WTPE: -
2749-59-9	220-389-2	2,4-dihydro-2,5-dimethyl-3H-pyrazol-3-one		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 23d	UBA: vM EC: vM min Dow=0.9 (2a)	Cramer Cl.III	< 10	DW: max 910 ng/L (D18) GW: - RW: - BF: - SW: - WTPE: -
62-75-9	-	n-Nitrosodimethylamine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 630 ng/L (D02,D10) GW: - RW: - BF: - SW: - WTPE: -
194992-44-4	-	Acetochlor OA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 550 ng/L (D02) GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: - WTPE: -
131-11-3	205-011-6	Dimethyl phthalate	(p)205-011-6; (p)420-910-5; (p)442-480-8	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test); OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)	UBA: vM EC: vM exp log Koc=1.9	(Pro.S.P._ED)	> 10	DW: max 540 ng/L (D07) GW: - RW: - BF: - SW: - WTPE: -
140-08-9	-	(2-chlorethyl) phosphat		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 470 ng/L (D02) GW: - RW: - BF: - SW: - WTPE: -
56070-16-7	-	Terbufos-sulfon		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 420 ng/L (D02) GW: - RW: - BF: - SW: - WTPE: -
108-70-3	203-608-6	1,3,5-trichlorobenzene		Potential PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 117d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: M EC: Not M exp log Koc=3.3	Cramer Cl.III	< 10	DW: max 410 ng/L (D02) GW: - RW: - BF: - SW: - WTPE: -
22504-72-9	-	N,N-dimethylsulfamide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 390 ng/L (D18) GW: - RW: - BF: - SW: - WTPE: -
164265-78-5	-	valsartanic acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 240 ng/L (D18) GW: - RW: - BF: - SW: - WTPE: -
126-54-5	-	2,4,8,10-tetraoxaspiro(5,5)undecan (TOSU)		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 140 ng/L (D18,D14) GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: - WTPE: -
1418095-19-8	-	metolachlor NOA 413173		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 100 ng/L (D18) GW: - RW: - BF: - SW: - WTPE: -
55-18-5	-	N-Nitrosodiethylamin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 85 ng/L (D02) GW: - RW: - BF: - SW: - WTPE: -
1217465-10-5	-	metolachlor CGA 357704		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 72 ng/L (D18) GW: - RW: - BF: - SW: - WTPE: -
56681-55-1	-	Hydroxyalachlor		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 44 ng/L (D02) GW: - RW: - BF: - SW: - WTPE: -
114-83-0	-	AMPH		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 40 ng/L (D18) GW: - RW: - BF: - SW: - WTPE: -
914637-49-3	-	5:3FTCA - 2H,2H,3H,3H-Perfluorooctanoic acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 39 ng/L (D01) GW: - RW: - BF: - SW: - WTPE: -
128-37-0	204-881-4	2,6-di-tert-butyl-p-cresol		Potential PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 68d, and consistency across all tested QSARs	UBA: Pot. M/vM EC: Not M min Dow=4.2 (2a)	(EDC_UnderAssess)(SINlist: This substance has endocrine	> 10	DW: max 26 ng/L (D04) GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
								disrupting properties. In vivo studies of Butylated Hydroxytoluene has shown that the substance disrupts thyroid gland function and morphology. Reduced fertility, altered growth and development, impaired learning and motor behaviours have also been observed in vivo. In vitro studies further indicate interference with testis enzymes, steroid production, growth hormones and antiandrogenic activity.)		SW: - WTPE: -
930-55-2	-	N-Nitrosopyrrolidin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 24 ng/L (D02) GW: - RW: - BF: - SW: - WTPE: -
924-16-3	-	N-Nitrosodibutylamin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 21 ng/L (D02) GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: - WTPE: -
64744-50-9	451-630-1	3,3-pentamethylene-4-butyrolactam		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 25d, and consistency across all tested QSARs	UBA: M EC: Pot. M/vM min Dow=2.7 (2a)	Cramer Cl.III	< 10	DW: max 20 ng/L (D18) GW: - RW: - BF: - SW: - WTPE: -
76-22-2	200-945-0	Bornan-2-one		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: vM EC: M exp log Koc=2.1	-	> 10	DW: max 17 ng/L (D03,D02) GW: - RW: - BF: - SW: - WTPE: -
2706-91-4	-	PFPS (C5-Sulfonate)		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 11 ng/L (D18) GW: - RW: - BF: - SW: - WTPE: -
62037-80-3	700-242-3	Ammonium 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoate		vPvM & PMT	vPvM & PMT	VP: short-chain PFAS, on SVHC list - vPvB substance	UBA: vM EC: vM exp log Koc=1.1	(SVHC: Equivalent level of concern having probable serious effects to human health (Article 57(f) - human health)#Equivalent level of concern having probable serious effects to the environment (Article 57(f) - environment))(PBT_UnderAssess)	> 10	DW: max 11 ng/L (D06) GW: - RW: - BF: - SW: - WTPE: -
79-34-5	-	Tetrachlorethan, 1,1,2,2-		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 10 ng/L (D02) GW: -



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										RW: - BF: - SW: - WTPE: -
10595-95-6	-	N-Nitrosomethylethylamine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 5 ng/L (D02) GW: - RW: - BF: - SW: - WTPE: -
69-81-8	-	Carbazochrome		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 2 ng/L (D17) GW: - RW: - BF: - SW: - WTPE: -
67906-42-7	-	PFDS		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 2 ng/L (D01,D06) GW: - RW: - BF: - SW: - WTPE: -
30223-73-5	-	2-Ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: max 1 ng/L (D17) GW: - RW: - BF: - SW: - WTPE: -
102-76-1	203-051-9	Triacetin		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)	UBA: vM EC: vM exp log Koc=-0.7	-	> 10	DW: detected (D21) GW: - RW: - BF: - SW: - WTPE: -
1066-42-8	TP of: 209-136-7	Dimethylsilanediol	(t1)209-136-7	insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 22d	UBA: vM EC: vM min Dow=1.1 (2a)	Cramer Cl.III	< 10	DW: detected (D14) GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: - WTPE: -
107-07-3	203-459-7	2-chloroethanol	(p)203-459-7; (t1)203-458-1	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 302 B (Inherent biodegradability: Zahn-Wellens/EMPA Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: vM EC: vM min Dow=-0.1 (2a)	Cramer Cl.III	< 10	DW: detected (D14) GW: - RW: - BF: - SW: - WTPE: -
118-74-1	-	Hexachlorobenzene		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D21) GW: - RW: - BF: - SW: - WTPE: -
128-44-9	-	Saccharin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D22) GW: - RW: - BF: - SW: - WTPE: -
130-14-3	204-976-0	Sodium naphthalene-1-sulphonate		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 46d	UBA: vM EC: vM exp log Koc=1.3	Cramer Cl.III	< 10	DW: detected (D21) GW: - RW: - BF: - SW: - WTPE: -
142-68-7	-	Tetrahydropyran (THP)		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D14) GW: - RW: - BF: - SW: - WTPE: -
144689-24-7	646-413-5	4-(2-hydroxypropan-2-yl)-2-propyl-1-[[2'-(1H-tetrazol-5-yl)biphenyl-4-yl]methyl]-1H-imidazole-5-carboxylic acid		vPvM	vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 310d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: vM min Dow=-1.2 (2b)	Cramer Cl.III	< 10	DW: detected (D14) GW: - RW: - BF: - SW: - WTPE: -
17675-60-4	241-659-6	Amidinourea phosphate	(s1)241-659-6; (s1)282-758-4; (s1)451-590-5; (s1)800-038-5	Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 28d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation	UBA: vM EC: vM min Dow=-4.1 (2c)	Cramer Cl.III	> 10	DW: detected (D14) GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						screen tests, e.g. OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))				SW: - WTPE: -
18467-77-1	-	Diprogulic acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D21) GW: - RW: - BF: - SW: - WTPE: -
2465-59-0	-	oxipurinol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D21) GW: - RW: - BF: - SW: - WTPE: -
25953-19-9	247-362-8	Cefazolin		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 122d, and consistency across all tested QSARs	UBA: vM EC: vM exp log Koc=-0.7	(STOTRE_Broad Consensus)	< 10	DW: detected (D16) GW: - RW: - BF: - SW: - WTPE: -
26636-32-8	-	Diethoxyoctylphenol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D02) GW: - RW: - BF: - SW: - WTPE: -
288-13-1	206-017-1	Pyrazole		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 20d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: vM exp log Koc=-0.4	Cramer Cl.III	> 10	DW: detected (D21) GW: - RW: - BF: - SW: - WTPE: -
332927-03-4	-	Acridin-9-carbonsäure		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: detected (D14) GW: - RW: - BF: - SW: - WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
603-52-1	210-047-0	Ethyl diphenylcarbamate		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 83d	UBA: M EC: Pot. M/vM min Dow=3.3 (2a)	Cramer Cl.III	< 10	DW: detected (D14) GW: - RW: - BF: - SW: - WTPE: -
826-36-8	212-554-2	2,2,6,6-tetramethyl-4-piperidone		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 55d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: vM min Dow=-2.0 (2c)	Cramer Cl.III	< 10	DW: detected (D21) GW: - RW: - BF: - SW: - WTPE: -
96-76-4	202-532-0	2,4-di-tert-butylphenol		PMT	Not PMT/vPvM	P: Conclusion of the PBT working group	UBA: M EC: Not M exp log Koc=3.7	(EDC_UnderAssess)(Pro.S.P._ED)	> 10	DW: detected (D14) GW: - RW: - BF: - SW: - WTPE: -
14260-98-1	-	ethanol,2-butoxy-phosphate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: max 960 ng/L (R06) BF: - SW: - WTPE: -
117-81-7	204-211-0	Bis(2-ethylhexyl) phthalate	(p)204-211-0; (p)271-085-1	Not PMT/vPvM	Not PMT/vPvM	vP: measured max t1/2.max(d): w=n.d.; s=365(vP); sed=337(vP)	UBA: Not M EC: Not M exp log Koc=5.7	(SVHC: Toxic for reproduction (Article 57c)#Endocrine disrupting properties (Article 57(f) - environment)#Endocrine disrupting properties (Article 57(f) - human health))(Rep1)(Ecotox_PMT2019)(SINlist: Classified CMR according to Annex VI of	> 10	DW: - GW: - RW: max 860 ng/L (R05) BF: - SW: - WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
								Regulation 1272/2008)(Pro. S.P._ED)		
110-82-7	203-806-2	Cyclohexane	(p)203-806-2; ; (p)271-816-4; (p)272-810-4; (p)272-812-5	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: M EC: Pot. M/vM min Dow=3.4 (2a)	(PBT_MinorityOpinion)	> 10	DW: - GW: - RW: max 420 ng/L (R05) BF: - SW: - WTPE: -
26027-38-3	500-045-0	4-Nonylphenol, ethoxylated		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 19d	UBA: M EC: Not M exp log Koc=3.1	(SVHC: Endocrine disrupting properties (Article 57(f) - environment))(S INlist: This substance is concluded to be an SVHC by the ECHA member state committee because of its endocrine disruptive properties in the environment.)	< 10	DW: - GW: - RW: max 392 ng/L (R03,R01) BF: - SW: - WTPE: -
84-69-5	201-553-2	Diisobutyl phthalate		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: vM EC: M exp log Koc=3.0	(SVHC: Toxic for reproduction (Article 57c)#Endocrine disrupting properties (Article 57(f) - human health))(Rep1)(S INlist: Classified CMR according to Annex VI of Regulation 1272/2008)(Pro. S.P._ED)	< 10	DW: - GW: - RW: max 306 ng/L (R05) BF: - SW: - WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
110-83-8	203-807-8	Cyclohexene		vPvM	vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 19d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: vM EC: vM exp log Koc=2.0	-	< 10	DW: - GW: - RW: max 110 ng/L (R05) BF: - SW: - WTPE: -
55406-53-6	259-627-5	3-iodo-2-propynyl butylcarbamate		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 77d	UBA: vM EC: vM exp log Koc=1.8	Cramer Cl.III	> 10	DW: - GW: - RW: max 70 ng/L (R05) BF: - SW: - WTPE: -
1125-21-9	214-406-2	2,6,6-trimethylcyclohex-2-ene-1,4-dione		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 A (Ready Biodegradability: DOC Die Away Test); OECD Guideline 301 A (Ready Biodegradability: DOC Die Away Test)	UBA: vM EC: vM min Dow=1.1 (2a)	-	< 10	DW: - GW: - RW: max 60 ng/L (R05) BF: - SW: - WTPE: -
62-53-3	200-539-3	Aniline	(p)200-539-3; (s1)270-109-8; (s1)500-036-1; (s1)500-079-6; (s2)500-007-3; (s4)274-987-3	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)	UBA: vM EC: vM exp log Koc=1.6	(Carc2)(Mut2)(Ecotox_PMT2019)(SINlist: Aniline is classified as a possible carcinogen (C3) and as a possible mutagenic substance (M3). Aniline is very toxic and has been found in both humans and environmental samples.)	> 10	DW: - GW: - RW: max 54 ng/L (R05) BF: - SW: - WTPE: -
95-51-2	202-426-4	2-chloroaniline		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 78d, and consistency across all tested QSARs	UBA: vM EC: vM exp log Koc=1.6	(Carc_BroadConsensus)	< 10	DW: - GW: - RW: max 25 ng/L (R05) BF: - SW: - WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
1333-16-0	908-912-9	2-[(2-hydroxyphenyl)methyl]phenol; 2-[(4-hydroxyphenyl)methyl]phenol; 4-[(4-hydroxyphenyl)methyl]phenol		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 43d, and consistency across all tested QSARs	UBA: M EC: Pot. M/vM min Dow=2.9 (2a)	Cramer Cl.III	> 10	DW: - GW: - RW: max 20 ng/L (R01) BF: - SW: - WTPE: -
32388-55-9	251-020-3	[3R-(3α,3αβ,7β,8αα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one		Potential PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 89d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: M EC: Not M exp log Koc=3.5	Cramer Cl.III	> 10	DW: - GW: - RW: max 14 ng/L (R03) BF: - SW: - WTPE: -
74191-85-8	616-059-6	[4-(4-amino-6,7-dimethoxyquinazolin-2-yl)piperazin-1-yl](2,3-dihydro-1,4-benzodioxin-2-yl)methanone		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 250d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: M min Dow=0,3 (2c)	Cramer Cl.III	< 10	DW: - GW: - RW: max 10 ng/L (R04) BF: - SW: - WTPE: -
106807-78-7	-	Nonylphenoxyethoxy acetic acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: max 4 ng/L (R03) BF: - SW: - WTPE: -
6145-73-9	-	Tris-2-chloropropyl phosphate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: max 3 ng/L (R03) BF: - SW: - WTPE: -
68140-48-7	268-799-0	1-[2,3-dihydro-1,1,2,6-tetramethyl-3-(1-methylethyl)-1H-inden-5-yl]ethan-1-one		Not PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 99d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: Not M EC: Not M min Dow=5.9 (2a)	-	< 10	DW: - GW: - RW: max 0 ng/L (R03) BF: - SW: - WTPE: -
154826-10-5	-	Octylphenoxy acetic acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: max 0 ng/L (R03) BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
-	TP of: 201-167-4 204-825-9	trans-1,2-Dichloroethene	(t3)201-167-4; (t1-3)204-825-9	insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 37d	UBA: vM EC: vM exp log Koc=1.4	Cramer Cl.III	< 10	SW: - WTPE: - DW: - GW: max 10 000 ng/L (G06) RW: - BF: - SW: - WTPE: -
108-90-7	203-628-5	Chlorobenzene	(p)203-628-5; (t1)203-400-5; (t1-1)204-428-0	vPvM	PM	Potential P/vP++: estimated t1/2 (error factor 10) = 28d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: M exp log Koc=2.5	Cramer Cl.III	> 10	DW: - GW: max 10 000 ng/L (G06) RW: - BF: - SW: - WTPE: -
74-87-3	200-817-4	chloromethane; methyl chloride	(p)200-817-4; (t2)200-838-9; (t1-2)200-663-8; (t1-2)212-742-4	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: vM EC: vM exp log Koc=0.8	(Carc2)	> 10	DW: - GW: max 10 000 ng/L (G06) RW: - BF: - SW: - WTPE: -
75-69-4	-	Trichlorofluoromethane		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 10 000 ng/L (G06) RW: - BF: - SW: - WTPE: -
75-71-8	200-893-9	Dichlorodifluoromethane		vPvM	vPvM	Potential P/vP++: apolar PFAS, estimated t1/2 (error factor 10) = 70d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: vM exp log Koc=1.2	Cramer Cl.III	> 10	DW: - GW: max 10 000 ng/L (G06) RW: - BF: - SW: - WTPE: -
103-65-1	-	n-Propylbenzene		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 5 000 ng/L (G06) RW: - BF: - SW: - WTPE: -
75-00-3	200-830-5	Chloroethane	(p)200-830-5; (t1-1)200-756-3	vPvM & PMT	vPvM & PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 24d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), available	UBA: vM EC: vM exp log Koc=0.8	(Carc2)	> 10	DW: - GW: max 5 000 ng/L (G06) RW: - BF: -



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						QSARs and no biodeg. observed in majority of biodegradation screen tests e.g. EU Method C.4-E (Determination of the "Ready" Biodegradability - Closed Bottle Test); EU Method C.4-E (Determination of the "Ready" Biodegradability - Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)				SW: - WTPE: -
76-13-1	-	Trichlorotrifluoroethane		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 5 000 ng/L (G06) RW: - BF: - SW: - WTPE: -
125-40-6	-	Butabarbital		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 1 000 ng/L (G02) RW: - BF: - SW: - WTPE: -
122-14-5	204-524-2	Fenitrothion		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 133d	UBA: vM EC: M exp log Koc=2.9	Cramer Cl.III	> 10	DW: - GW: max 550 ng/L (G07) RW: - BF: - SW: - WTPE: -
56038-13-2	259-952-2	1,6-dichloro-1,6-dideoxy-β-D-fructofuranosyl 4-chloro-4-deoxy-α-D-galactose		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 198d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test) 1981	UBA: vM EC: vM min Dow=-0.5 (2a)	Cramer Cl.III	> 10	DW: - GW: max 520 ng/L (G13) RW: - BF: - SW: - WTPE: -
106-93-4	203-444-5	1,2-dibromoethane		vPvM & PMT	vPvM & PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 30d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: vM exp log Koc=0.1	(Carc1ab)(SINlit: Classified CMR according to Annex VI of Regulation 1272/2008)(Pro. S.P. ED)	> 10	DW: - GW: max 500 ng/L (G06) RW: - BF: - SW: - WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
68411-44-9	270-126-0	Benzene, butyl-, branched and linear		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 22d	UBA: M EC: Not M exp log Koc=3.2	-	< 10	DW: - GW: max 500 ng/L (G06) RW: - BF: - SW: - WTPE: -
74-83-9	200-813-2	Bromomethane		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 22d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: vM exp log Koc=0.7	(Mut2)(Pro.S.P._ED)	< 10	DW: - GW: max 500 ng/L (G06) RW: - BF: - SW: - WTPE: -
994-05-8	213-611-4	2-methoxy-2-methylbutane		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 69d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: vM EC: vM exp log Koc=0.7	Cramer Cl.III	> 10	DW: - GW: max 500 ng/L (G06) RW: - BF: - SW: - WTPE: -
839705-03-2	445-750-3	(R,S)-1-[2-amino-1(4-methoxyphenyl)ethyl]cyclohexanol acetate	(s1)445-750-3; (s1)603-392-7	insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 50d	UBA: vM EC: vM min Dow=-1.6 (2c)	Cramer Cl.III	< 10	DW: - GW: max 410 ng/L (G13) RW: - BF: - SW: - WTPE: -
77-04-3	-	Pyrithyldione		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 190 ng/L (G15) RW: - BF: - SW: - WTPE: -
152459-95-5	604-855-6	Benzamide, 4-[[4-methyl-1-piperazinyl)methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]-		PMT	Potential PMT/vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 3 664d, weight-of-evidence by discovery in monitoring studies (UBA, 2019), and consistent indications of P across tested QSARs	UBA: M EC: Pot. M/vM min Dow=0.7 (2c)	(Rep_BroadConsensus)	< 10	DW: - GW: max 100 ng/L (G02) RW: - BF: - SW: - WTPE: -
15935-54-3	-	Carboxybuprofen		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 100 ng/L (G02) RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: - WTPE: -
50-36-2	-	Cocaine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 100 ng/L (G02,G07) RW: - BF: - SW: - WTPE: -
72-44-6	-	Methaqualone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 100 ng/L (G02) RW: - BF: - SW: - WTPE: -
74-11-3	TP of: 203-247-4	4-Chlorobenzoate	(t1)203-247-4	insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 29d	UBA: vM EC: vM min Dow=-5.5 (2b)	Cramer Cl.III	< 10	DW: - GW: max 100 ng/L (G02) RW: - BF: - SW: - WTPE: -
-	TP of: 424-610-5	Fipronil-metabolite		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 5 562d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM min Dow=1.0 (2a)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 34 ng/L (S01) WTPE: -
37439-34-2	253-506-0	Sodium 3,5,6-trichloropyridin-2-olate		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 139d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM min Dow=-0.6 (2b)	Cramer Cl.III	< 10	DW: - GW: max 71 ng/L (G13) RW: - BF: - SW: - WTPE: -
58-61-7	200-389-9	Adenosine		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: vM EC: vM exp log Koc=-1.1	-	> 10	DW: - GW: max 37 ng/L (G13) RW: - BF: - SW: - WTPE: -
110964-79-9	601-017-1	4-methanesulfonyl-2-nitrobenzoic acid		vPvM	vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 62d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation	UBA: vM EC: vM min Dow=-8.0 (2b)	Cramer Cl.III	< 10	DW: - GW: max 30 ng/L (G13) RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						screen tests, e.g. OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)				SW: - WTPE: -
36315-01-2	252-969-6	4,6-dimethoxypyrimidin-2-amine		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 29d	UBA: vM EC: vM min Dow=-0.7 (2c)	Cramer Cl.III	< 10	DW: - GW: max 25 ng/L (G13) RW: - BF: - SW: - WTPE: -
127-73-1	-	N-Acetylsulfamerazine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 18 ng/L (G15) RW: - BF: - SW: - WTPE: -
176969-34-9	700-093-4	3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxylic acid		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 17d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test); EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test)	UBA: vM EC: vM min Dow=-2.9 (2a)	Cramer Cl.III	< 10	DW: - GW: max 13 ng/L (G13) RW: - BF: - SW: - WTPE: -
35255-37-9	-	N-Acetylsulfamethazine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 6 ng/L (G15) RW: - BF: - SW: - WTPE: -
150-68-5	205-766-1	Monuron		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 48d	UBA: vM EC: vM exp log Koc=1.4	(Carc2)	> 10	DW: - GW: max 4 ng/L (G13) RW: - BF: - SW: - WTPE: -
1582-09-8	-	Trifluralin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 2 ng/L (G07) RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: - WTPE: -
-	TP of: 405-230-9	Cycloxydim-metabolite	(t5)405-230-9	insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 30d	UBA: vM EC: vM min Dow=-1.8 (2b)	Cramer Cl.III	< 10	DW: - GW: max 2 ng/L (G13) RW: - BF: - SW: - WTPE: -
-	TP of: 429-890-2	Iodosulfuron-methyl-metabolite		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 61d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: M min Dow=1.0 (2b)	Cramer Cl.III	< 10	DW: - GW: max 2 ng/L (G13) RW: - BF: - SW: - WTPE: -
214217-88-6	-	p-Hydroxyatorvastatin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 2 ng/L (G15) RW: - BF: - SW: - WTPE: -
-	TP of: 217-617-8	Deisopropylhydroxyatrazine	(t2-1)217-617-8	insufficient data	insufficient data	no conclusion/data: no data	UBA: vM EC: vM min Dow=-2.0 (2b)	-	< 10	DW: - GW: max 2 ng/L (G13) RW: - BF: - SW: - WTPE: -
-	TP of: 429-890-2 401-190-1	Iodosulfuron-methyl-metabolite	(t3)429-890-2; (t6)401-190-1	insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 40d	UBA: vM EC: M min Dow=-0.4 (2c)	Cramer Cl.III	< 10	DW: - GW: max 2 ng/L (G13) RW: - BF: - SW: - WTPE: -
214217-86-4	-	o-Hydroxyatorvastatin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: max 1 ng/L (G15) RW: - BF: - SW: - WTPE: -
1014-69-3	-	Desmetryn		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: detected (G05) RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: - WTPE: -
116-06-3	-	Aldicarb		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: detected (G05) RW: - BF: - SW: - WTPE: -
139-13-9	205-355-7	Nitriilotriacetic acid	(s1)225-768-6; (p)205-355-7; (s1)302-766-4	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)	UBA: vM EC: vM min Dow=-11.5 (2b)	Cramer Cl.III	> 10	DW: - GW: detected (G05) RW: - BF: - SW: - WTPE: -
298-00-0	-	Parathion-methyl		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: detected (G05) RW: - BF: - SW: - WTPE: -
3060-89-7	-	Metobromuron		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: detected (G05) RW: - BF: - SW: - WTPE: -
59-89-2	-	NMOR - N-Nitrosomorpholine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: detected (G05) RW: - BF: - SW: - WTPE: -
72-20-8	-	Endrin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: detected (G05) RW: - BF: - SW: - WTPE: -
841-06-5	-	Methoprotryn		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: detected (G05) RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: - WTPE: -
88040-23-7	-	Cefepime		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: max 546 ng/L (B02) SW: - WTPE: -
-	-	1,3,5-Triazin-2-ol, 4,6-di-4-morpholinyl-		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
-	-	2,4,6-Tri(2-pyridinyl)-1,3,5-triazine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
-	-	21-Hydroxypregn-4-ene-3,20-dione		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
-	-	2-Chloroaniline-5-sulfonic acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
-	-	2-Pyridylethylamine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
-	-	3-[4-(Methoxycarbonyl)phenyl]-1-propanesulfonic acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
-	-	3-Methyladenine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	SW: - WTPE: -
-	-	3'-O-Acetylthymidine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
-	-	4,6-Dimethylpyrimidin-2-olý		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
-	-	4-Decylbenzenesulfonic acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
-	-	4-Phenyl-1,2,3,6-tetrahydropyridine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
-	-	5-(2-Pyridinyl)-1H-pyrazole-3-carboxylic acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
-	-	5,6-Diamino-1,3-Dimethyluracil		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04)



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
-	-	5-Isopropyl-2-methylbenzenesulfonic acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	SW: - WTPE: - DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
-	-	6,7-Dihydroxy-2-naphthalenesulfonic acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
-	-	Diphenylphosphinic acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
-	-	Ebert-Merz a-Acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
-	-	Ethyl 2-sulfamoylbenzoate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
-	-	Methylephedrine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
-	-	N,N-Dipropyl-1,4-benzenediamine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
-	-	O,O-Diethyl thiophosphate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	SW: - WTPE: -
-	-	O-mesitylsulfonylhydroxylamine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
-	-	Ozagrel		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
-	-	Pheniprazine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
-	-	Retinal 2		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
-	-	Tetramethylsulfamide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
-	-	Zearalanone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: detected (B04)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: - WTPE: -
103-26-4	203-093-8	Methyl cinnamate		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): EU Method C.4-B (Determination of the "Ready" Biodegradability - Modified OECD Screening Test); EU Method C.4-B (Determination of the "Ready" Biodegradability - Modified OECD Screening Test)	UBA: M EC: Pot. M/vM min Dow=2.7 (2a)	-	> 10	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
1068-90-2	213-952-9	Diethyl acetamidomalonate		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 9d	UBA: vM EC: vM min Dow=0.1 (2a)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
107-66-4	203-509-8	Dibutyl hydrogen phosphate		vPvM	vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 25d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. EU Method C.4-E (Determination of the "Ready" Biodegradability - Closed Bottle Test) Cited as RG Directive 79/831/ Annex V; EU Method C.4-E (Determination of the "Ready" Biodegradability - Closed Bottle Test) Cited as RG Directive 79/831/ Annex V; OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: vM EC: vM exp log Koc=0.5	-	> 10	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
108-62-3	203-600-2	2,4,6,8-tetramethyl-1,3,5,7-tetraoxacyclooctane		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 538d	UBA: vM EC: vM min Dow=0.1 (2a)	(Rep2)	< 10	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
1093205-95-8	700-837-8	3-hydroxy-2,2-dimethyl-N-propylpropanamide		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 17d	UBA: vM EC: vM min Dow=1.2 (2a)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
118-88-7	204-282-8	4-aminotoluene-2-sulphonic acid		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 113d, and consistency across all tested QSARs	UBA: vM EC: vM min Dow=-1.5 (2b)	(Pro.S.P._ED)	< 10	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
13048-33-4	235-921-9	Hexamethylene diacrylate		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 310 (Ready Biodegradability - CO2 in Sealed Vessels (Headspace Test)); OECD Guideline 310 (Ready Biodegradability - CO2 in Sealed Vessels (Headspace Test))	UBA: M EC: Pot. M/vM min Dow=2.8 (2a)	(PBT_MinorityOpinion)Cramer Cl.III	> 10	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
132-57-0	205-066-6	7-hydroxynaphthalene-1-sulphonic acid		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 63d	UBA: vM EC: M min Dow=0.6 (2b)	-	< 10	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
13826-35-2	237-525-1	3-phenoxybenzyl alcohol	(p)237-525-1; (t8)407-980-2	Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 19d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: vM EC: M exp log Koc=3.0	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
15763-76-5	239-854-6	Sodium p-cumenesulphonate	(s1)239-854-6; (s1)629-764-9; (s1)811-484-5; (p)240-210-1	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)	UBA: vM EC: vM min Dow=-1.1 (2a)	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
2682-20-4	220-239-6	2-methyl-2H-isothiazol-3-one	(p)220-239-6; (s1)247-499-3; (s2)911-418-6	Not PMT/vPvM	Not PMT/vPvM	Not P: measured max t1/2.max(d): w=5(not P); s=69(not P); sed=5(not P)	UBA: vM EC: vM exp log Koc=1.1	-	> 10	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
27213-90-7	248-326-4	Sodium diisobutylphthalenesulphonate		PM	PM	P: measured max t1/2.max(d): w=n.d.; s=137(P); sed=n.d.	UBA: vM EC: vM exp log Koc=1.8	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
2760-98-7	220-425-7	Isophthalohydrazide		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 129d	UBA: vM EC: vM min Dow=-1.4 (2a)	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
3144-16-9	221-554-1	2-oxobornane-10-sulphonic acid	(s2)448-180-3; (s2)806-795-8; (p)221-554-1; (p)227-527-0; (p)252-817-9; (p)700-176-5; (s2)444-810-6; (s2)601-680-7	Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 73d, and consistency across all tested QSARs	UBA: vM EC: vM min Dow=-1.4 (2b)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
538-75-0	208-704-1	Dicyclohexylcarbodiimide		Potential PMT/vPvM	Not PMT/vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 37d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: Pot. M/vM EC: Not M min Dow=4.2 (2a)	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
77-71-4	201-051-3	5,5-dimethylhydantoin		vPvM	vPvM	vP: measured max t1/2.max(d): w=n.d.; s=n.d.; sed=1 170(vP)	UBA: vM EC: vM exp log Koc=1.8	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
84238-45-9	282-500-0	Benzenesulfonic acid, 4-dodecyl-, cerium(4+) salt, basic		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)	UBA: M EC: Pot. M/vM min Dow=2.2 (2b)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: detected (B04)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: - WTPE: -
84-86-6	201-567-9	4-aminonaphthalene-1-sulphonic acid	(s1)204-975-5; (p)201-567-9	Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 171d, and consistency across all tested QSARs	UBA: vM EC: vM min Dow=-1.1 (2b)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
84-87-7	201-568-4	4-hydroxynaphthalene-1-sulphonic acid	(s1)228-050-0; (s2)402-240-5; (p)201-568-4	Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 63d, and consistency across all tested QSARs	UBA: vM EC: vM min Dow=-1.1 (2b)	(Pro.S.P._ED)	< 10	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
84-89-9	201-571-0	5-aminonaphthalene-1-sulphonic acid		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 94d	UBA: vM EC: vM min Dow=-1.1 (2b)	-	< 10	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
88-22-2	201-811-4	2-amino-3,5-xylenesulphonic acid	(s1)264-925-3; (p)201-811-4	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: vM EC: vM exp log Koc=1.3	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
88-50-6	201-836-0	4-amino-2,5-dichlorobenzenesulphonic acid		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 334d, and consistency across all tested QSARs	UBA: vM EC: vM min Dow=0.0 (2b)	(Pro.S.P._ED)	< 10	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
88-53-9	201-839-7	5-amino-2-chlorotoluene-4-sulphonic acid		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 187d	UBA: vM EC: vM min Dow=-0.9 (2b)	-	< 10	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
93-01-6	202-209-4	6-hydroxynaphthalene-2-sulphonic acid	(s1)205-218-1; (s1)212-631-0; (s2)417-260-1; (p)202-209-4	Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 63d, and consistency across all tested QSARs	UBA: vM EC: vM min Dow=-0.5 (2b)	(Pro.S.P._ED)	< 10	DW: - GW: - RW: - BF: detected (B04)

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: - WTPE: -
98-32-8	202-657-0	3-amino-4-hydroxybenzenesulpho namide		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 83d, and consistency across all tested QSARs	UBA: vM EC: vM min Dow=-0.8 (2b)	(Pro.S.P._ED)	< 10	DW: - GW: - RW: - BF: detected (B04) SW: - WTPE: -
31218-83-4	-	Propetamphos		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 19 200 000 ng/L (S06) WTPE: -
52315-07-8	-	Cypermethrin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 85 100 ng/L (S06) WTPE: -
95-76-1	202-448-4	3,4-dichloroaniline	(p)202-448-4; (t1)206-354-4	vPvM & PMT	PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 133d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: vM EC: M exp log Koc=2.3	(Pro.S.P._ED)	< 10	DW: - GW: - RW: - BF: - SW: max 80 025 ng/L (S01) WTPE: -
67-64-1	200-662-2	Acetone	(p)200-662-2; (s2)270-192-0; (s2)500-011-5; (s2)921-654-1; (t1)201-209-1	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)	UBA: vM EC: vM min Dow=-0.2 (2a)	(Ecotox_Enviroto ox)	> 10	DW: - GW: - RW: - BF: - SW: max 10 070 ng/L (S01) WTPE: -
3089-11-0	-	Hexa(methoxymethyl) melamine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 6 878 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
71-36-3	200-751-6	Butan-1-ol	(p)200-751-6; (s1)227-006-8	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: vM EC: vM exp log Koc=0.1	(PBT_MinorityOpinion)	> 10	DW: - GW: - RW: - BF: - SW: max 5 743 ng/L (S01) WTPE: -
10265-92-6	-	Methamidophos		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 5 671 ng/L (S01) WTPE: -
55335-06-3	-	Triclopyr		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 5 641 ng/L (S01) WTPE: -
-	TP of: 428-040-8	Imidacloprid-metabolite	(t10)428-040-8	insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 70d	UBA: vM EC: vM min Dow=0.5 (2a)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 5 238 ng/L (S01) WTPE: -
4292-10-8	224-292-6	(carboxymethyl)dimethyl-3-[(1-oxododecyl)amino]propylammonium hydroxide	(p)263-058-8; (s1)224-292-6	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): EPA OPPTS 835.3120 (Sealed Vessel Carbon Dioxide Production Test); EPA OPPTS 835.3120 (Sealed Vessel Carbon Dioxide Production Test); EU Method C.4-F (Determination of the "Ready" Biodegradability - MITI Test); EU Method C.4-F (Determination of the "Ready" Biodegradability - MITI Test)	UBA: M EC: Not M exp log Koc=3.4	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 3 353 ng/L (S01) WTPE: -
-	TP of: 205-736-8	Benzothiazole-2-sulfonate	(t2)205-736-8	insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 47d	UBA: vM EC: vM min Dow=-0.4 (2b)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 3 198 ng/L (S01) WTPE: -
360-68-9	-	5-beta-coprostanol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: -



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										BF: - SW: max 2 717 ng/L (S06,S03) WTPE: -
1122-58-3	214-353-5	N,N-dimethylpyridin-4-amine		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 62d	UBA: vM EC: vM exp log Koc=0.8	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 2 638 ng/L (S01) WTPE: -
532-03-6	-	Methocarbamol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 2 492 ng/L (S06,S01) WTPE: -
120-40-1	204-393-1	N,N-bis(2-hydroxyethyl)dodecanamide		Not PMT/vPvM	Not PMT/vPvM	Not P: estimated t1/2 (error factor 10) = 6d, and consistency across all tested QSARs	UBA: Not M EC: Not M min Dow=5.9 (2a)	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 2 467 ng/L (S01,S03) WTPE: -
838-85-7	-	diphenyl phosphate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 2 218 ng/L (S01) WTPE: -
69770-45-2	-	Flumethrin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 2 190 ng/L (S06) WTPE: -
122-39-4	204-539-4	Diphenylamine	(p)204-539-4; (s1)500-011-5	PMT	Not PMT/vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 67d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD	UBA: M EC: Not M exp log Koc=3.4	(Pro.S.P._ED)	> 10	DW: - GW: - RW: - BF: - SW: max 2 039 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)				
19466-47-8	-	beta-Stigmastanol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 920 ng/L (S01) WTPE: -
5352-88-5	-	3(4-Chlorophenyl)-1-methyl urea		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 500 ng/L (S01) WTPE: -
64249-01-0	-	Anilofos		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 456 ng/L (S01) WTPE: -
-	TP of: 428-040-8	Imidacloprid-metabolite	(t6)428-040-8	insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 70d	UBA: vM EC: vM min Dow=-7.7 (2c)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 1 410 ng/L (S01) WTPE: -
513-88-2	208-175-7	1,1-dichloroacetone		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 39d	UBA: vM EC: vM exp log Koc=0.7	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 1 408 ng/L (S01) WTPE: -
1918-00-9	-	Dicamba		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 400 ng/L (S01) WTPE: -
23950-58-5	-	Pronamide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										BF: - SW: max 1 400 ng/L (S01) WTPE: -
75-05-8	200-835-2	Acetonitrile	(p)200-835-2; (s2)690-796-1	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 310 (Ready Biodegradability - CO2 in Sealed Vessels (Headspace Test)); OECD Guideline 310 (Ready Biodegradability - CO2 in Sealed Vessels (Headspace Test))	UBA: vM EC: vM exp log Koc=-0.5	(Carc_MinorOpinion)Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 1 344 ng/L (S01) WTPE: -
1918-11-2	-	Terbucarb		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 260 ng/L (S01) WTPE: -
26725-51-9	-	4-Hydroxybenzotriazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 076 ng/L (S01) WTPE: -
29331-92-8	-	10,11-Dihydro-10-hydroxycarbamazepine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 065 ng/L (S01) WTPE: -
121-14-2	-	2,4-Dinitrotoluene		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 018 ng/L (S01) WTPE: -
133855-98-8	406-850-2	(2RS,3RS)-3-(2-chlorophenyl)-2-(4-fluorophenyl)-[(1H-1,2,4-triazol-1-yl)methyl]oxirane		Potential PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 1 549d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: Pot. M/vM EC: Not M min Dow=3.6 (2a)	(Carc2)(Rep1)	< 10	DW: - GW: - RW: - BF: - SW: max 992 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
109-87-5	203-714-2	Dimethoxymethane		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 88d	UBA: vM EC: vM exp log Koc=-0.4	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 971 ng/L (S01) WTPE: -
87392-12-9	-	S-Metolachlor		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 960 ng/L (S01) WTPE: -
615-22-5	-	2-(Methylthio)-benzothiazol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 931 ng/L (S01) WTPE: -
81777-89-1	-	Clomazone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 927 ng/L (S01) WTPE: -
102-36-3	203-026-2	3,4-dichlorophenyl isocyanate		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 77d, and consistency across all tested QSARs	UBA: vM EC: M min Dow=1.7 (2a)	(STOTRE_Broad Consensus)	< 10	DW: - GW: - RW: - BF: - SW: max 926 ng/L (S01) WTPE: -
27503-81-7	248-502-0	2-phenyl-1H-benzimidazole-5-sulphonic acid		PM	PM	Potential P/vP++: estimated t1/2 (error factor 10) = 118d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test); EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test); EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test); EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test); EU Method C.4-D (Determination of the	UBA: vM EC: vM min Dow=-1.4 (2b)	-	> 10	DW: - GW: - RW: - BF: - SW: max 901 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						"Ready" Biodegradability - Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)				
299-84-3	-	Fenchlorphos		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 777 ng/L (S06) WTPE: -
52888-80-9	401-730-6	S-benzyl N,N-dipropylthiocarbamate		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 71d	UBA: vM EC: M exp log Koc=2.7	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 690 ng/L (S01) WTPE: -
55219-65-3	-	Triadimenol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 688 ng/L (S01) WTPE: -
40487-42-1	-	Pendimethalin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 578 ng/L (S01) WTPE: -
75-45-6	200-871-9	Chlorodifluoromethane		PM	PM	Potential P/vP++: apolar PFAS, estimated t1/2 (error factor 10) = 29d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: vM EC: vM exp log Koc=0.6	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 569 ng/L (S01) WTPE: -
154598-52-4	-	Efavirenz		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 560 ng/L (S06,S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
127087-87-0	500-315-8	4-Nonylphenol, branched, ethoxylated		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (II))	UBA: vM EC: M exp log Koc=2.6	(SVHC: Endocrine disrupting properties (Article 57(f) - environment))(S INlist: This substance is concluded to be an SVHC by the ECHA member state committee because of its endocrine disruptive properties in the environment.)	< 10	DW: - GW: - RW: - BF: - SW: max 532 ng/L (S01) WTPE: -
55965-84-9	911-418-6	2-Methyl-1,2-thiazol-3(2H)-one - 5-chloro-2-methyl-1,2-thiazol-3(2H)-one		Not PMT/vPvM	Not PMT/vPvM	Not P: measured max t1/2.max(d): w=n.d.; s=69(not P); sed=5(not P)	UBA: vM EC: vM exp log Koc=0.8	-	> 10	DW: - GW: - RW: - BF: - SW: max 510 ng/L (S01) WTPE: -
2536-31-4	-	Chlorflurecol-methyl ester		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 505 ng/L (S01) WTPE: -
950-81-2	-	4-Formyl-antipyrine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 493 ng/L (S01) WTPE: -
94-09-7	202-303-5	Benzocaine		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 27d	UBA: vM EC: vM exp log Koc=1.0	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 460 ng/L (S01,S03) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
69477-29-8	614-977-1	2,6-bis-(Diethanolamino)-4,8-dipiperidinopyrimido-(5,4-d)-pyrimidine, tosylat salt		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 546d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM exp log Koc=1.1	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 460 ng/L (S06) WTPE: -
4065-45-6	223-772-2	Sulisobenzone	(s1)457-010-7; (s2)442-880-2; (s2)457-900-5; (p)223-772-2	PMT	PMT	P: All biodegradation results in 301F and 302B tests imply no significant biodegradation. Therefore, this substance is assessed to be persistent in water. (Berger et al. 2018)	UBA: vM EC: vM exp log Koc=2.0	(Pro.S.P._ED)	> 10	DW: - GW: - RW: - BF: - SW: max 457 ng/L (S01) WTPE: -
76420-72-9	-	Enalaprilat		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 440 ng/L (S01) WTPE: -
141-78-6	205-500-4	Ethyl acetate	(p)205-500-4; ; (t1)201-159-0	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: vM EC: vM min Dow=0.7 (2a)	-	> 10	DW: - GW: - RW: - BF: - SW: max 409 ng/L (S01) WTPE: -
64741-60-2	265-062-5	Distillates (petroleum), intermediate catalytic cracked		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (inherently biodeg): OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: M EC: Not M exp log Koc=3.8	(Carc1ab)(SINlist: Classified CMR according to Annex VI of Regulation 1272/2008)	> 10	DW: - GW: - RW: - BF: - SW: max 408 ng/L (S01) WTPE: -
50512-35-1	-	Isoprothiolane		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 397 ng/L (S01) WTPE: -
78-93-3	201-159-0	Butanone	(p)201-159-0; ; (t1-1)419-430-9; (t1-1)222-931-3; (t1-1)284-461-5	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): EPA OTS 796.3200 (Ready Biodegradability: Closed Bottle Test); EPA OTS 796.3200 (Ready Biodegradability: Closed Bottle Test); EU Method C.4-E (Determination of the "Ready" Biodegradability - Closed Bottle Test); EU Method C.4-E (Determination of the "Ready" Biodegradability - Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: vM EC: vM exp log Koc=-0.2	-	> 10	DW: - GW: - RW: - BF: - SW: max 382 ng/L (S01) WTPE: -
108-94-1	203-631-1	Cyclohexanone	(p)203-631-1; (t1)203-630-6; (t1)906-627-4; (t1)203-629-0; (t1)221-516-4; (t1)940-650-0; (t1-1)205-348-9; (t1-1)203-806-2; (t1-1)270-147-5; (t1-1)271-816-4; (t1-1)272-810-4; (t1-1)272-812-5	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: vM EC: vM min Dow=0.9 (2a)	-	> 10	DW: - GW: - RW: - BF: - SW: max 372 ng/L (S01) WTPE: -
28249-77-6	-	Benthiocarb		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 343 ng/L (S01) WTPE: -
101-42-8	202-941-4	Fenuron		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 28d	UBA: vM EC: vM exp log Koc=0.5	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 320 ng/L (S01) WTPE: -
23893-13-2	-	Anhydroerythromycin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: -



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 306 ng/L (S01) WTPE: -
90-43-7	201-993-5	Biphenyl-2-ol	(s1)205-055-6; (p)201-993-5	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test); EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)	UBA: vM EC: M exp log Koc=2.5	(Pro.S.P._ED)	> 10	DW: - GW: - RW: - BF: - SW: max 300 ng/L (S01) WTPE: -
26225-79-6	-	Ethofumesate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 290 ng/L (S01) WTPE: -
106-47-8	203-401-0	4-chloroaniline	(p)203-401-0; (t1)209-057-8	vPvM & PMT	vPvM & PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 78d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: vM EC: vM exp log Koc=1.5	(Carc1ab)(SINlist: Classified CMR according to Annex VI of Regulation 1272/2008)	< 10	DW: - GW: - RW: - BF: - SW: max 290 ng/L (S01) WTPE: -
94-81-5	-	MCPB		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 290 ng/L (S01) WTPE: -
137-88-2	-	Amprolium		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 288 ng/L (S06) WTPE: -
530-78-9	208-494-1	Flufenamic acid		Not PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 148d, and	UBA: Not M EC: Not M exp log Koc=4.0	Cramer Cl.III	< 10	DW: - GW: - RW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						BIOWIN screen tool as recommended in the PBT guideline				BF: - SW: max 288 ng/L (S01) WTPE: -
131860-33-8	-	Azoxystrobin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 280 ng/L (S01) WTPE: -
88671-89-0	410-400-0	$\alpha$ -n-butyl- $\alpha$ -(4-chlorophenyl)-1H-1,2,4-triazole-1-propanenitrile		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 62d	UBA: Pot. M/vM EC: Not M min Dow=4.4 (2a)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 273 ng/L (S01) WTPE: -
104273-73-6	-	Trinexapac acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 270 ng/L (S01) WTPE: -
58594-72-2	261-351-5	1-[2-(allyloxy)ethyl-2-(2,4-dichlorophenyl)-1H-imidazolium hydrogen sulphate		vPvM	vPvM	vP: measured max t1/2.max(d): w=n.d.; s=171(P); sed=187(vP)	UBA: vM EC: vM min Dow=1.3 (2a)	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 263 ng/L (S01) WTPE: -
6197-30-4	228-250-8	Octocrilene		Not PMT/vPvM	Not PMT/vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 37d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test); EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test)	UBA: Not M EC: Not M exp log Koc=4.5	(PBT_UnderAssess)	> 10	DW: - GW: - RW: - BF: - SW: max 259 ng/L (S01) WTPE: -
17804-35-2	-	Benomyl		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 256 ng/L (S01) WTPE: -
485-72-3	207-623-9	7-hydroxy-3-(4-methoxyphenyl)-4-benzopyrone		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): EPA OPPTS 835.3110 (Ready Biodegradability) Paragraph (m); EU Method C.4-C (Determination of the "Ready" Biodegradability - Carbon Dioxide Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)	UBA: vM EC: M min Dow=0.9 (2b)	-	< 10	DW: - GW: - RW: - BF: - SW: max 250 ng/L (S01) WTPE: -
74222-97-2	-	Sulfometuron-methyl		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 248 ng/L (S01) WTPE: -
15299-99-7	-	Napropamide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 243 ng/L (S01) WTPE: -
75-15-0	200-843-6	Carbon disulphide		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: vM EC: vM exp log Koc=1.1	(Rep2)(SINlist: This substance has endocrine disrupting properties. Human workers exposed to the chemical have shown dysfunctional sex behaviour, lowered sperm quality and alterations in testosterone levels. Animal studies show similar results including increased malformations in offspring and	> 10	DW: - GW: - RW: - BF: - SW: max 238 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
								alterations in levels of dopamine and noradrenaline in the adrenal gland. (Pro.S.P._ED)		
18181-80-1	-	Bromopropylate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 232 ng/L (S01) WTPE: -
16118-49-3	-	Carbetamide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 230 ng/L (S01) WTPE: -
96-83-3	-	Iopanoic acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 230 ng/L (S06) WTPE: -
486460-32-6	690-730-1	(3R)-3-amino-1-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)butan-1-one		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 37 553d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM min Dow=-5.4 (2c)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 227 ng/L (S01,S06) WTPE: -
64359-81-5	-	DCOIT		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 226 ng/L (S01,S03) WTPE: -
759-94-4	212-073-8	EPTC		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 33d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation	UBA: vM EC: M exp log Koc=3.0	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						screen tests, e.g. OECD Guideline 301 A (Ready Biodegradability: DOC Die Away Test); OECD Guideline 301 A (Ready Biodegradability: DOC Die Away Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)				SW: max 224 ng/L (S01) WTPE: -
24280-93-1	-	Mycophenolic acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 223 ng/L (S01) WTPE: -
1918-16-7	-	Propachlor		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 220 ng/L (S01) WTPE: -
51-03-6	200-076-7	2-(2-butoxyethoxy)ethyl 6-propylpiperonyl ether		Not PMT/vPvM	Not PMT/vPvM	P: measured max t1/2.max(d): w=n.d.; s=14(not P); sed=165(P)	UBA: Not M EC: Not M min Dow=4,8 (2a)	(Pro.S.P._ED)	< 10	DW: - GW: - RW: - BF: - SW: max 220 ng/L (S01) WTPE: -
599-64-4	-	4-Cumylphenol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 220 ng/L (S01) WTPE: -
126-07-8	-	Griseofulvin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 218 ng/L (S01,S01) WTPE: -
88-04-0	201-793-8	4-chloro-3,5-xyleneol		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (inherently biodeg): OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: vM EC: M exp log Koc=2.1	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 215 ng/L (S01) WTPE: -
521-18-6	208-307-3	Androstanolone		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 75d, and consistency across all tested QSARs	UBA: M EC: Pot. M/vM min Dow=3.4 (2a)	(Rep_BroadConsensus)(StotRE_MinorOpinion)(Pro.S.P._ED)	< 10	DW: - GW: - RW: - BF: - SW: max 209 ng/L (S01) WTPE: -
23103-98-2	-	Pirimicarb		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 204 ng/L (S01) WTPE: -
256-96-2	205-970-0	5H-dibenz[b,f]azepine		Potential PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 99d, and consistency across all tested QSARs	UBA: Pot. M/vM EC: Not M min Dow=3.9 (2a)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 197 ng/L (S01) WTPE: -
110488-70-5	-	Dimethomorph(E)		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 195 ng/L (S01) WTPE: -
153719-23-4	-	Thiamethoxam DP		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 190 ng/L (S01) WTPE: -
38083-17-9	253-775-4	Climbazole		PMT	Not PMT/vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 95d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: M EC: Not M exp log Koc=3.8	(EDC_UnderAssess)(Ecotox_PMT2019)	> 10	DW: - GW: - RW: - BF: - SW: max 190 ng/L (S01,S03) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
626-43-7	210-948-9	3,5-dichloroaniline		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 133d, and consistency across all tested QSARs	UBA: vM EC: M exp log Koc=2.2	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 186 ng/L (S01) WTPE: -
481-29-8	-	Epiandrosterone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 183 ng/L (S01) WTPE: -
2814-20-2	-	2-Isopropyl-6-methyl-pyrimidin-4-ol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 181 ng/L (S01) WTPE: -
107-14-2	203-467-0	Chloroacetonitrile		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 21d	UBA: vM EC: vM exp log Koc=0.0	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 180 ng/L (S01) WTPE: -
99102-04-2	-	Erythrohydrobupropion		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 180 ng/L (S06) WTPE: -
1665-48-1	-	Metaxalone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 178 ng/L (S06,S01) WTPE: -
70628-36-3	-	Propachlor-OXA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 170 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
-	TP of: 202-396-2 205-736-8	2-Hydroxybenzothiazole	(t1)202-396-2; ; (t2-1)205-736-8	insufficient data	insufficient data	no conclusion/data: no data	UBA: vM EC: vM min Dow=1.5 (2a)	-	< 10	DW: - GW: - RW: - BF: - SW: max 165 ng/L (S01) WTPE: -
101205-02-1	-	Cycloxydim		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 160 ng/L (S01) WTPE: -
24579-73-5	-	Propamocarb		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 160 ng/L (S01) WTPE: -
66063-05-6	-	Pencycron		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 160 ng/L (S01) WTPE: -
110-62-3	203-784-4	Valeraldehyde		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: vM EC: vM exp log Koc=0.4	-	> 10	DW: - GW: - RW: - BF: - SW: max 160 ng/L (S01) WTPE: -
99-55-8	202-765-8	5-nitro-o-toluidine	(p)202-765-8; (t2-1)204-289-6	Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 155d, and consistency across all tested QSARs	UBA: vM EC: vM exp log Koc=1.5	(Carc2)	< 10	DW: - GW: - RW: - BF: - SW: max 159 ng/L (S01) WTPE: -
120068-37-3	424-610-5	fipronil (ISO); (±)-5-amino-1-(2,6-dichloro-α,α,α-trifluoro-paratolyl)-4-trifluoromethylsulfinyl-pyrazole-3-carbonitrile		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 3 295d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM min Dow=1.1 (2a)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 153 ng/L (S01,S01) WTPE: -



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
1077-56-1	-	N-Ethyl-o-toluenesulfonamide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 152 ng/L (S01) WTPE: -
57837-19-1	-	Metalaxyl		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 151 ng/L (S01) WTPE: -
60-27-5	200-466-7	2-imino-1-methylimidazolidin-4-one		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): EU Method C.4-B (Determination of the "Ready" Biodegradability - Modified OECD Screening Test); EU Method C.4-B (Determination of the "Ready" Biodegradability - Modified OECD Screening Test); OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test); OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)	UBA: vM EC: vM min Dow=-2.1 (2a)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 150 ng/L (S01) WTPE: -
123-72-8	204-646-6	Butyraldehyde	(p)204-646-6; ; (p)903-567-0; ; (p)904-298-1; ; (p)918-257-0; ; (p)919-594-6; ; (s2)270-109-8	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: vM EC: vM min Dow=1.3 (2a)	-	> 10	DW: - GW: - RW: - BF: - SW: max 149 ng/L (S01) WTPE: -
56354-06-4	-	THC-COOH		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 145 ng/L (S01) WTPE: -
89-78-1	201-939-0	Menthol	(p)201-939-0; (p)218-690-9	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): EU Method C.4-E (Determination of the "Ready" Biodegradability - Closed Bottle Test); EU Method C.4-E (Determination of the "Ready"	UBA: M EC: Pot. M/vM min Dow=3.3 (2a)	-	> 10	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						Biodegradability - Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)				SW: max 144 ng/L (S01) WTPE: -
101-84-8	202-981-2	Diphenyl ether		PM	Not PMT/vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 21d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: M EC: Not M exp log Koc=3.3	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 141 ng/L (S01) WTPE: -
1185255-09-7	-	Azoxystrobin acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 140 ng/L (S01) WTPE: -
23210-56-2	-	Ifenprodil		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 140 ng/L (S06) WTPE: -
83463-62-1	-	Bromochloroacetonitrile		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 140 ng/L (S01) WTPE: -
887-54-7	-	Dacthal monoacid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 139 ng/L (S01) WTPE: -
106-44-5	203-398-6	p-cresol	(p)203-398-6; (s1)215-293-2; (p)284-892-9; (p)700-427-9; (t1)211-522-5; (t1)223-927-4;	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: vM EC: vM exp log Koc=1.7	(Pro.S.P._ED)	> 10	DW: - GW: - RW: - BF: - SW: max 135 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
			(t1)237-301-3; (t1)239-421-1; (t1)246-002-7; (t1)420-960-8; (t1)700-195-9; (t1)413-290-2; (t1)419-570-0; (t1)420-680-6; (t1)426-070-6; (t1)435-090-4; (t1)604-261-7; (t1)700-589-0; (t1)927-186-4; (t1)940-053-5; (t1)942-021-6; (t4)203-625-9; (t4)272-951-1; (t4)309-870-9							
165252-70-0	605-399-0	dinotefuran (ISO); 1-methyl-2-nitro-3-(tetrahydro-3-furylmethyl)guanidine		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 59d	UBA: vM EC: vM min Dow=-2.7 (2a)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 134 ng/L (S01) WTPE: -
23135-22-0	-	Oxamyl		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 130 ng/L (S01) WTPE: -
20830-75-5	-	Digoxin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 130 ng/L (S06) WTPE: -
517-09-9	-	Equilenin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 130 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
58-94-6	-	Chlorothiazide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 130 ng/L (S06) WTPE: -
5728-52-9	-	Felbinac		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 123 ng/L (S06) WTPE: -
13194-48-4	-	Ethoprophos		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 122 ng/L (S01) WTPE: -
1689-84-5	-	Bromoxynil		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 119 ng/L (S01,S01) WTPE: -
53112-28-0	-	Pyri methanil		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 113 ng/L (S01,S01) WTPE: -
206-44-0	-	Fluoranthene		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 110 ng/L (S01) WTPE: -
90982-32-4	618-690-2	Ethyl 2-(4-chloro-6-methoxypyrimidin-2-ylcarbamoylsulfamoyl) benzoate		vPvM	PM	vP: measured max t1/2.max(d): w=210(vP); s=53(not P); sed=n.d.	UBA: vM EC: M min Dow=1.3 (2b)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 109 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
137-17-7	-	2,4,5-Trimethylaniline		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 107 ng/L (S01) WTPE: -
11006-76-1	-	Virginiamycin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 100 ng/L (S06) WTPE: -
28797-61-7	249-228-4	Pirenzepine	(p)249-228-4; (s1)812-545-9	Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 386d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM exp log Koc=-0.3	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 100 ng/L (S06) WTPE: -
76-73-3	-	Secobarbital		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 100 ng/L (S06) WTPE: -
78-59-1	201-126-0	3,5,5-trimethylcyclohex-2-enone		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): EU Method C.4-A (Determination of the "Ready" Biodegradability - Dissolved Organic Carbon (DOC) Die-Away Test); EU Method C.4-A (Determination of the "Ready" Biodegradability - Dissolved Organic Carbon (DOC) Die-Away Test); EU Method C.4-A (Determination of the "Ready" Biodegradability - Dissolved Organic Carbon (DOC) Die-Away Test); EU Method C.4-A (Determination of the "Ready" Biodegradability - Dissolved Organic Carbon (DOC) Die-Away Test)	UBA: vM EC: vM exp log Koc=1.3	(Carc2)(EDC_UnderAssess)	> 10	DW: - GW: - RW: - BF: - SW: max 99 ng/L (S01) WTPE: -
7173-51-5	230-525-2	Didecyltrimethylammonium chloride		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD	UBA: vM EC: M exp log Koc=2.8	(Ecotox_Envirotox)	> 10	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)				SW: max 98 ng/L (S01) WTPE: -
113096-99-4	-	Cyproconazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 98 ng/L (S01) WTPE: -
7206-76-0	-	2-ethyl-2-phenylmalonamide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 95 ng/L (S01) WTPE: -
70434-92-3	-	Cannabicyclohexanol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 93 ng/L (S01) WTPE: -
99105-77-8	-	Sulcotrione		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 91 ng/L (S01) WTPE: -
2921-88-2	-	Chlorpyrifos		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 90 ng/L (S01) WTPE: -
486-66-8	-	Daidzein		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 88 ng/L (S01) WTPE: -
86-73-7	201-695-5	Fluorene		Potential PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 48d, and consistency across all tested QSARs	UBA: M EC: Not M exp log Koc=3.5	Cramer Cl.III	< 10	DW: - GW: - RW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										BF: - SW: max 87 ng/L (S01) WTPE: -
42874-03-3	-	Oxyfluorfen		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 86 ng/L (S01) WTPE: -
43210-67-9	-	Fenbendazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 86 ng/L (S06) WTPE: -
36734-19-7	-	Iprodione		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 86 ng/L (S01) WTPE: -
2135-17-3	218-370-9	Flumetasone		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 334d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM min Dow=1.3 (2a)	(Rep_BroadConsensus)(Pro.S.P._ED)	< 10	DW: - GW: - RW: - BF: - SW: max 85 ng/L (S06) WTPE: -
36749-35-6	-	Deethylcyanazine acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 84 ng/L (S01) WTPE: -
1014-70-6	-	Simetryn		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 83 ng/L (S01) WTPE: -
106700-29-2	-	Pethoxamid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										BF: - SW: max 80 ng/L (S01) WTPE: -
60397-77-5	-	2,4-dimethylphenylformamid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 80 ng/L (S01) WTPE: -
55-56-1	200-238-7	Chlorhexidine	(p)200-238-7; (s1)223-026-6; (s1)242-354-0	PMT	Not PMT/vPvM	vP: estimated t1/2 (error factor 10) = 2 360d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: M EC: Not M exp log Koc=3.9	(Ecotox_PMT2019)	< 10	DW: - GW: - RW: - BF: - SW: max 78 ng/L (S06) WTPE: -
18507-89-6	-	Decoquinat		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 76 ng/L (S06) WTPE: -
364-62-5	206-662-9	Metoclopramide		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 160d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM exp log Koc=1.7	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 76 ng/L (S06) WTPE: -
1709-59-7	-	4-Amino-N,N-dimethylbenzenesulfonamide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 75 ng/L (S01) WTPE: -
33704-61-9	251-649-3	1,2,3,5,6,7-hexahydro-1,1,2,3,3-pentamethyl-4H-inden-4-one		PM	PM	Potential P/vP++: estimated t1/2 (error factor 10) = 80d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: vM EC: M exp log Koc=2.3	-	> 10	DW: - GW: - RW: - BF: - SW: max 74 ng/L (S01) WTPE: -



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
-	TP of: 234-232-0	2-Aminobenzimidazole	(t1)234-232-0	insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 61d	UBA: vM EC: M min Dow=-0.3 (2c)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 74 ng/L (S01) WTPE: -
120-75-2	-	2-Methylbenzothiazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 73 ng/L (S01) WTPE: -
66069-34-9	266-104-5	[2R-(2α,3Z,5α)]-3-(2-hydroxyethylidene)-7-oxo-4-oxa-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, compound with tert-butylamine (1:1)		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): EPA OPPTS 835.3110 (Ready Biodegradability); EPA OPPTS 835.3110 (Ready Biodegradability); EU Method C.4-C (Determination of the "Ready" Biodegradability - Carbon Dioxide Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); EU Method C.4-C (Determination of the "Ready" Biodegradability - Carbon Dioxide Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)	UBA: vM EC: vM exp log Koc=1.3	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 71 ng/L (S06) WTPE: -
118134-30-8	-	Spiroxa mine I		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 71 ng/L (S01) WTPE: -
59-05-2	-	Methotrexate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 71 ng/L (S01) WTPE: -
89-83-8	201-944-8	Thymol		Not PMT/vPvM	Not PMT/vPvM	Not P: Ambiguous mostly Not P: EU Method C.4-E (Determination of the "Ready" Biodegradability - Closed Bottle Test); EU Method C.4-E (Determination of the "Ready" Biodegradability - Closed Bottle Test); OECD Guideline 301 C (Ready Biodegradability:	UBA: M EC: Not M exp log Koc=3.1	-	> 10	DW: - GW: - RW: - BF: - SW: max 70 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						Modified MITI Test (I)); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)				
34970-00-8	-	Bromochloroiodomethane		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 70 ng/L (S01) WTPE: -
918-00-3	-	1,1,1-Trichloro-2-propanone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 70 ng/L (S01) WTPE: -
132-64-9	-	Dibenzofuran		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 70 ng/L (S01) WTPE: -
39300-45-3	-	Dinocap I		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 68 ng/L (S01) WTPE: -
210880-92-5	433-460-1	clothianidin (ISO); (E)-1-(2-chloro-1,3-thiazol-5-ylmethyl)-3-methyl-2-nitroguanidine		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 152d	UBA: vM EC: vM min Dow=-0.9 (2c)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 66 ng/L (S01) WTPE: -
950-37-8	-	Methodathion		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 66 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
111988-49-9	-	Thiacloprid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 65 ng/L (S01) WTPE: -
123312-54-9	404-050-8	N,N-dimethyl-N,N-dioctadecylammonium hydrogen sulfate		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 30d	UBA: Not M EC: Not M min Dow=11.1 (2c)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 65 ng/L (S01) WTPE: -
28159-98-0	-	Irgarol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 64 ng/L (S01) WTPE: -
82560-54-1	-	Benfurcarb		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 64 ng/L (S01) WTPE: -
133855-98-8	-	Epoxyconazol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 64 ng/L (S01) WTPE: -
104206-82-8	-	Mesotrione		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 61 ng/L (S01) WTPE: -
105-59-9	203-312-7	2,2'-methyliminodiethanol	(p)203-312-7; (s2)434-840-8	PM	PM	Potential P/vP++: estimated t1/2 (error factor 10) = 17d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 A (Ready Biodegradability: DOC Die Away Test);	UBA: vM EC: vM exp log Koc=-1.6	-	< 10	DW: - GW: - RW: - BF: - SW: max 61 ng/L (S04) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						OECD Guideline 301 A (Ready Biodegradability: DOC Die Away Test); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))				
173159-57-4	-	Foramsulfuron		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 61 ng/L (S01) WTPE: -
175013-18-0	-	Pyraclostrobin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 61 ng/L (S01) WTPE: -
94-97-3	-	5-chloro-1H-benzotriazole (CBT)		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 61 ng/L (S01) WTPE: -
1330-78-5	-	Tricresyl phosphate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 60 ng/L (S01) WTPE: -
594-04-7	-	Dichloriodomethane		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 60 ng/L (S01) WTPE: -
98-10-2	202-637-1	Benzenesulphonamide		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 37d, and consistency across all tested QSARs	UBA: vM EC: vM exp log Koc=-0.1	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 60 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
74-97-5	200-826-3	Bromochloromethane		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 31d, and consistency across all tested QSARs	UBA: vM EC: vM exp log Koc=1.1	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 59 ng/L (S01) WTPE: -
446-72-0	-	Genistein		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 59 ng/L (S01,S01) WTPE: -
135410-20-7	-	Acetamiprid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 58 ng/L (S01) WTPE: -
16773-42-5	-	Ornidazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 58 ng/L (S06) WTPE: -
125-71-3	-	Dextromethorphan		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 57 ng/L (S06,S01) WTPE: -
17902-23-7	-	Tegafur		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 56 ng/L (S06) WTPE: -
39809-25-1	-	Penciclovir		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 56 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
123312-89-0	-	Pymetrozin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 54 ng/L (S01) WTPE: -
123-03-5	204-593-9	Cetylpyridinium chloride		Not PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 19d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: Not M EC: Not M exp log Koc=4.8	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 53 ng/L (S01) WTPE: -
23696-28-8	-	Olaquinox		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 53 ng/L (S06) WTPE: -
109-66-0	203-692-4	Pentane	(p)203-692-4; (p)270-684-5; (p)270-686-6; (p)270-695-5; (p)270-705-8; (p)271-727-0; (p)295-442-6	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: M EC: Pot. M/vM min Dow=3.5 (2a)	-	> 10	DW: - GW: - RW: - BF: - SW: max 53 ng/L (S01) WTPE: -
38345-66-3	-	Chirald		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 52 ng/L (S01) WTPE: -
75-99-0	-	Dalapon		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 52 ng/L (S01) WTPE: -
125-73-5	-	Dextrorphan		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										BF: - SW: max 50 ng/L (S06) WTPE: -
15310-01-7	-	Benodanil		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 50 ng/L (S01) WTPE: -
335104-84-2	-	Tembotrione		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 50 ng/L (S01) WTPE: -
76608-88-3	-	Triapenthenol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 50 ng/L (S01) WTPE: -
3376-94-1	-	norpropoxyphene		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 50 ng/L (S01) WTPE: -
106-97-8	203-448-7	Butane	(p)203-448-7; (p)270-071-2; (p)270-077-5; (p)270-660-4; (p)270-691-3; (p)270-704-2; (p)270-752-4; (p)271-010-2; (p)272-931-2; (p)289-339-5; (p)306-006-2; (p)903-812-1; (p)931-740-0; (s3)235-841-4	Not PMT/vPvM	Not PMT/vPvM	Not P: estimated t1/2 (error factor 10) = 14d, and consistency across all tested QSARs	UBA: vM EC: vM min Dow=1.1 (2a)	(Carc1ab)(Mut1)	> 10	DW: - GW: - RW: - BF: - SW: max 49 ng/L (S01) WTPE: -
69377-81-7	-	Fluroxypyr(free acid)		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										RW: - BF: - SW: max 49 ng/L (S01) WTPE: -
91-57-6	202-078-3	2-methylnaphthalene		Potential PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 28d, and consistency across all tested QSARs	UBA: M EC: Not M exp log Koc=3.1	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 48 ng/L (S01) WTPE: -
83066-88-0	617-435-2	(2R)-2-(4-([5-(trifluoromethyl)pyridin-2-yl]oxy)phenoxy)propanoic acid		insufficient data	insufficient data	no conclusion/data: no data	UBA: vM EC: vM exp log Koc=1.6	-	< 10	DW: - GW: - RW: - BF: - SW: max 48 ng/L (S01) WTPE: -
71675-85-9	-	Amisulpride		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 47 ng/L (S06,S01) WTPE: -
50-29-3	-	p,p'-DDT		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 45 ng/L (S01) WTPE: -
141517-21-7	-	Trifloxystrobin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 45 ng/L (S01) WTPE: -
53-03-2	-	Prednisone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 45 ng/L (S06) WTPE: -
125116-23-6	-	Metconazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: -



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										RW: - BF: - SW: max 45 ng/L (S01) WTPE: -
88-75-5	201-857-5	2-nitrophenol		PM	PM	Potential P/vP++: estimated t1/2 (error factor 10) = 60d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (II))	UBA: vM EC: vM exp log Koc=1.4	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 44 ng/L (S01) WTPE: -
3598-16-1	222-746-8	Sodium phenoxyacetate hemihydrate		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): EU Method C.4-B (Determination of the "Ready" Biodegradability - Modified OECD Screening Test); EU Method C.4-B (Determination of the "Ready" Biodegradability - Modified OECD Screening Test); OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test); OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)	UBA: vM EC: vM min Dow=-2.2 (2a)	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 43 ng/L (S01) WTPE: -
4205-90-7	-	Clonidine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 43 ng/L (S01) WTPE: -
158062-67-0	-	Flonicamid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 42 ng/L (S01) WTPE: -
1689-83-4	-	Ioxynil		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 41 ng/L (S01) WTPE: -
87130-20-9	-	Diethofencarb		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										RW: - BF: - SW: max 40 ng/L (S01) WTPE: -
3252-43-5	-	Dibromoacetonitrile		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 40 ng/L (S01) WTPE: -
638-73-3	-	Chlorodiiodomethane		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 40 ng/L (S01) WTPE: -
31430-15-6	-	Flubendazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 39 ng/L (S06) WTPE: -
3094-09-5	-	Doxifluridine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 39 ng/L (S06) WTPE: -
119-65-3	204-341-8	Isoquinoline		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vp: estimated t1/2 (error factor 10) = 29d, and consistency across all tested QSARs	UBA: vM EC: vM exp log Koc=1.4	(Carc_BroadConsensus)	< 10	DW: - GW: - RW: - BF: - SW: max 38 ng/L (S01) WTPE: -
581-42-0	-	2,6-Dimethylnaphthalene		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 38 ng/L (S01) WTPE: -
2032-65-7	-	Methiocarb		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										RW: - BF: - SW: max 38 ng/L (S01) WTPE: -
99-99-0	202-808-0	4-nitrotoluene		VPvM & PMT	PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 66d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (II))	UBA: vM EC: M min Dow=2.4 (2a)	(Pro.S.P._ED)	> 10	DW: - GW: - RW: - BF: - SW: max 38 ng/L (S01) WTPE: -
29094-61-9	-	Glipizide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 37 ng/L (S01) WTPE: -
81335-37-7	-	Imazaquin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 37 ng/L (S01) WTPE: -
34014-18-1	-	Tebuthiuron		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 36 ng/L (S01) WTPE: -
85-41-6	201-603-3	Phthalimide		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (II)); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: vM EC: vM exp log Koc=0.9	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 36 ng/L (S01) WTPE: -
-	TP of: 424-610-5	Fipronil-metabolite		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 6 820d, and	UBA: vM EC: M	Cramer Cl.III	< 10	DW: - GW: max 71 ng/L (G13) RW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						BIOWIN screen tool as recommended in the PBT guideline	min Dow=0.8 (2b)			BF: - SW: - WTPE: -
83055-99-6	401-340-6	Methyl $\alpha$ -((4,6-dimethoxypyrimidin-2-yl)ureidosulfonyl)-o-toluate		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 70d	UBA: vM EC: M min Dow=0.9 (2b)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 34 ng/L (S01) WTPE: -
66215-27-8	-	Cyromazine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 33 ng/L (S01) WTPE: -
120983-64-4	-	Prothioconazole-desthio		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 32 ng/L (S01) WTPE: -
85509-19-9	-	Flusilazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 32 ng/L (S01) WTPE: -
16752-77-5	-	METHOMYL		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 31 ng/L (S01) WTPE: -
119446-68-3	-	Difenoconazol I		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 30 ng/L (S01) WTPE: -
5989-27-5	227-813-5	(R)-p-mentha-1,8-diene		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test);	UBA: M EC: Not M exp log Koc=3.2	(PBT_MinorityOpinion)	> 10	DW: - GW: - RW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)				BF: - SW: max 30 ng/L (S01) WTPE: -
-	930-638-3	5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[[1R,S)-(trifluoromethyl)thio]-1H-pyrazole-3-carbonitrile	(p)930-638-3; (t1)424-610-5	Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 4 940d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: M min Dow=2.2 (2a)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 29 ng/L (S01) WTPE: -
112410-23-8	412-850-3	N-tert-butyl-N'-(4-ethylbenzoyl)-3,5-dimethylbenzohydrazide		Not PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 970d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: Not M EC: Not M min Dow=6.3 (2a)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 29 ng/L (S01) WTPE: -
220899-03-6	-	Metrafenone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 29 ng/L (S01) WTPE: -
76963-41-2	-	Nizatidine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 29 ng/L (S06) WTPE: -
1134-23-2	214-482-7	S-ethyl N-cyclohexylthiocarbamate		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 49d	UBA: vM EC: M exp log Koc=2.5	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 29 ng/L (S01) WTPE: -
634-03-7	-	Phendimetrazine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 29 ng/L (S01) WTPE: -
531-95-3	-	Equol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 28 ng/L (S01) WTPE: -
27314-13-2	-	Norflurazon		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 27 ng/L (S01) WTPE: -
491-80-5	-	5,7-Dihydroxy-4'-methoxyisoflavone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 27 ng/L (S01) WTPE: -
60-29-7	200-467-2	Diethyl ether	(p)200-467-2; (s1)203-689-8	insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 39d	UBA: vM EC: vM min Dow=0.8 (2a)	-	> 10	DW: - GW: - RW: - BF: - SW: max 27 ng/L (S01) WTPE: -
87-65-0	-	2,6-Dichlorophenol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 26 ng/L (S01) WTPE: -
35045-02-4	-	Metribuzin DA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 26 ng/L (S01) WTPE: -
133-90-4	-	Chloramben (Amiben)		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 25 ng/L (S01) WTPE: -
53-06-5	-	Cortisone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 25 ng/L (S06) WTPE: -
130-95-0	-	Quinine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 25 ng/L (S01) WTPE: -
55142-85-3	-	ticlopidine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 24 ng/L (S01) WTPE: -
374726-62-2	-	Mandipropamid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 24 ng/L (S01) WTPE: -
72-55-9	-	p,p'-DDE		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 24 ng/L (S01) WTPE: -
88-85-7	201-861-7	Dinoseb		<b>vPvM &amp; PMT</b>	<b>PMT</b>	vP: measured max t1/2.max(d): w=n.d.; s=340(vP); sed=n.d.	UBA: vM EC: M exp log Koc=2.9	(SVHC: Toxic for reproduction (Article 57c))(Rep1) (DNEL)(SINlist: Classified CMR according to Annex VI of Regulation 1272/2008)	> 10	DW: - GW: - RW: - BF: - SW: max 23 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
126833-17-8	-	Fenhexamid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 23 ng/L (S01) WTPE: -
79356-08-4	-	Maduramycin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 23 ng/L (S06) WTPE: -
976-71-6	-	Canrenone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 23 ng/L (S01) WTPE: -
120-72-9	204-420-7	Indole	(p)204-420-7; (s2)272-683-5	insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 30d	UBA: vM EC: vM exp log Koc=2.0	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 23 ng/L (S01) WTPE: -
57-42-1	200-329-1	Pethidine		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 58d	UBA: vM EC: vM exp log Koc=1.5	(STOTRE_Broad Consensus)	< 10	DW: - GW: - RW: - BF: - SW: max 23 ng/L (S01) WTPE: -
33089-74-6	-	Amitraz metabolite [Methanimidamide, N-(2,4-dimethylphenyl)-N'-methyl-]		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 23 ng/L (S01) WTPE: -
65059-42-9	265-332-2	Trimethyloctylammonium methyl sulphate		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)) Adopted : 1992-07-17	UBA: vM EC: vM min Dow=-1.9 (2c)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 22 ng/L (S01) WTPE: -



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
177406-68-7	-	Benthiavalicarb-isopropyl		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 22 ng/L (S01) WTPE: -
112281-77-3	407-760-6	(+/-) 2-(2,4-dichlorophenyl)-3-(1H-1,2,4-triazole-1-yl)propyl-1,1,2,2-tetrafluoroethylether		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 386d, and BOWIN screen tool as recommended in the PBT guideline	UBA: M EC: Pot. M/vM min Dow=2.9 (2a)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 22 ng/L (S01) WTPE: -
82657-04-3	-	Bifenthrin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 22 ng/L (S01) WTPE: -
1088-11-5	214-123-4	Nordazepam		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 79d	UBA: M EC: Pot. M/vM min Dow=2.9 (2a)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 22 ng/L (S01) WTPE: -
139528-85-1	-	Metosulam		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 21 ng/L (S01) WTPE: -
83-67-0	201-494-2	Theobromine		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test); EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: vM EC: vM exp log Koc=-1.2	-	< 10	DW: - GW: - RW: - BF: - SW: max 21 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
74070-46-5	-	Aclonifen		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 20 ng/L (S01) WTPE: -
64741-45-3	265-045-2	Residues (petroleum), atm. tower	(p)265-045-2; (p)265-053-6; (p)265-054-1; (p)265-058-3; (p)265-063-0; (p)265-064-6; (p)265-076-1; (p)265-081-9; (p)265-082-4; (p)265-097-6; (p)265-098-1; (p)265-103-7; (p)265-104-2; (p)265-159-2; (p)265-162-9; (p)265-169-7; (p)265-181-2; (p)265-189-6	Not PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 256d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: Not M EC: Not M min Dow=6.2 (2a)	(Carc1ab)(SINlis t: Classified CMR according to Annex VI of Regulation 1272/2008)(Pro. S.P._ED)	> 10	DW: - GW: - RW: - BF: - SW: max 20 ng/L (S01) WTPE: -
154361-50-9	-	Capecitabine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 20 ng/L (S06) WTPE: -
3576-88-3	222-695-1	2,2'-iminobis[4,6-diamino-1,3,5-triazine]		vPvM	vPvM	vP: estimated t1/2 (error factor 10) = 1 445d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: vM EC: vM min Dow=-3.4 (2c)	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 20 ng/L (S04) WTPE: -
593-94-2	-	Dibromiodomethane		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 20 ng/L (S01) WTPE: -
21187-98-4	-	Gliclazide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 20 ng/L (S06) WTPE: -
64742-90-1	265-193-8	Residues (petroleum), steam-cracked		Not PMT/vPvM	Not PMT/vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 237d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: Not M EC: Not M exp log Koc=5.1	(Carc1ab)(Mut_BroadConsensus)(SINlist: Classified CMR according to Annex VI of Regulation 1272/2008)	> 10	DW: - GW: - RW: - BF: - SW: max 19 ng/L (S01) WTPE: -
98-53-3	202-678-5	4-tert-butylcyclohexanone		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (inherently biodeg): EU Method C.4-E (Determination of the "Ready" Biodegradability - Closed Bottle Test); EU Method C.4-E (Determination of the "Ready" Biodegradability - Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: M EC: Pot. M/vM min Dow=3.1 (2a)	-	< 10	DW: - GW: - RW: - BF: - SW: max 18 ng/L (S01) WTPE: -
119-36-8	204-317-7	Methyl salicylate		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)	UBA: vM EC: vM exp log Koc=1.6	(EDC_UnderAssess)	> 10	DW: - GW: - RW: - BF: - SW: max 18 ng/L (S01) WTPE: -
161326-34-7	-	Fenamidone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 18 ng/L (S01) WTPE: -
67306-00-7	-	Fenpropidin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 18 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
2164-17-2	218-500-4	Fluometuron		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 121d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM exp log Koc=1.5	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 18 ng/L (S01) WTPE: -
79983-71-4	413-050-7	(RS)-2-(2,4-dichlorophenyl)-1-(1H-1,2,4-triazol-1-yl)hexan-2-ol		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 114d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: M EC: Pot. M/vM min Dow=3.3 (2a)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 17 ng/L (S01) WTPE: -
99-09-2	202-729-1	3-nitroaniline		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 164d	UBA: vM EC: vM exp log Koc=1.2	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 16 ng/L (S01) WTPE: -
102-77-2	203-052-4	2-(morpholiniothio)benzo thiazole		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 109d, and consistency across all tested QSARs	UBA: vM EC: vM exp log Koc=1.2	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 16 ng/L (S01) WTPE: -
6164-98-3	-	Chlordimeform		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 16 ng/L (S01) WTPE: -
136470-78-5	-	Abacavir		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 15 ng/L (S06) WTPE: -
5902-51-2	-	Terbacil		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 15 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
143390-89-0	-	Kresoxim-methyl		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 15 ng/L (S01) WTPE: -
3337-62-0	-	3,5-dibromo-4-hydroxybenzoic acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 15 ng/L (S01) WTPE: -
125225-28-7	-	Ipconazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 15 ng/L (S01) WTPE: -
140923-17-7	-	Iprovalicarb		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 14 ng/L (S01) WTPE: -
81-25-4	-	Cholic acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 14 ng/L (S01) WTPE: -
378-44-9	206-825-4	Betamethasone		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 320d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: M min Dow=2.0 (2a)	(Rep_BroadConsensus)(Pro.S.P._ED)	< 10	DW: - GW: - RW: - BF: - SW: max 13 ng/L (S06) WTPE: -
53774-07-5	-	Bifenox-acid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 13 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
83-34-1	201-471-7	3-methylindole		vPvM & PMT	vPvM & PMT	vP: All biodegradation results in 301C and 302B tests imply no significant biodegradation. Therefore, this substance is assessed to be persistent in water. (Berger et al. 2018)	UBA: vM EC: vM min Dow=-2.6 (2a)	STOTE RE (nephrotoxic in combination with cyanuric acid)T	< 10	DW: - GW: - RW: - BF: - SW: max 13 ng/L (S01) WTPE: -
132-22-9	-	Chlorphenamine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 13 ng/L (S06,S01) WTPE: -
10287-53-3	233-634-3	Ethyl 4-dimethylaminobenzoate		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 26d	UBA: vM EC: M exp log Koc=2.7	(Rep_BroadConsensus)	> 10	DW: - GW: - RW: - BF: - SW: max 13 ng/L (S01) WTPE: -
82834-16-0	-	Perindopril		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 13 ng/L (S06) WTPE: -
1643-20-5	216-700-6	Dodecyl dimethylamine oxide		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): EPA OPPTS 835.3110 (Ready Biodegradability); EPA OPPTS 835.3110 (Ready Biodegradability); EU Method C.4-C (Determination of the "Ready" Biodegradability - Carbon Dioxide Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); EU Method C.4-C (Determination of the "Ready" Biodegradability - Carbon Dioxide Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)	UBA: vM EC: M exp log Koc=2.5	(Ecotox_PMT2019)(Ecotox_Envirotox)	> 10	DW: - GW: - RW: - BF: - SW: max 12 ng/L (S01) WTPE: -
86-74-8	201-696-0	Carbazole		Potential PMT/vPvM	Not PMT/vPvM	Pot. P/vP: biodegradation screening tests give conflicting results	UBA: M EC: Not M exp log Koc=3.4	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 12 ng/L (S01) WTPE: -
35367-38-5	-	Diflubenzuron		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 12 ng/L (S01) WTPE: -
135590-91-9	603-923-2	diethyl 1-(2,4-dichlorophenyl)-5-methyl-4,5-dihydro-1H-pyrazole-3,5-dicarboxylate		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 102d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: M exp log Koc=2.8	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 12 ng/L (S01) WTPE: -
55179-31-2	-	Bitertanol I		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 12 ng/L (S01) WTPE: -
1563-38-8	-	Carbofuran-7-phenol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 12 ng/L (S01) WTPE: -
87857-41-8	-	norsertaline		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 12 ng/L (S01) WTPE: -
1918-02-1	-	Picloram		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 11 ng/L (S01) WTPE: -
96525-23-4	-	Flurta mone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 11 ng/L (S01) WTPE: -
73986-53-5	-	O-Desmethyltramadol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 11 ng/L (S01) WTPE: -
72-54-8	-	p,p'-DDD		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 11 ng/L (S01) WTPE: -
50-24-8	200-021-7	Prednisolone		vPvM & PMT	PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 146d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: vM EC: M min Dow=1.6 (2a)	(Rep_BroadCon sensus)(Pro.S.P. _ED)	< 10	DW: - GW: - RW: - BF: - SW: max 11 ng/L (S01) WTPE: -
68011-66-5	-	2-Hydroxycarbamazepine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 11 ng/L (S01) WTPE: -
361377-29-9	-	Fluoxastrobin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 11 ng/L (S01) WTPE: -
95-48-7	202-423-8	o-cresol	(p)202-423-8; (s2)447-750-9; (s3)215-293-2; (t2)203-625-9; (t2)272-951-1; (t2)309-870-9	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: vM EC: vM exp log Koc=1.3	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 11 ng/L (S01) WTPE: -



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
26093-31-2	-	7-Amino-4-methylcoumarin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 11 ng/L (S01) WTPE: -
107868-30-4	-	Exemestane		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 10 ng/L (S06) WTPE: -
120375-14-6	-	Metolachlor-Morpholinon		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 10 ng/L (S01) WTPE: -
126535-15-7	-	Triflusulfuron-methyl		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 10 ng/L (S01) WTPE: -
155213-67-5	-	Ritonavir		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 10 ng/L (S06) WTPE: -
90-12-0	201-966-8	1-methylnaphthalene		Potential PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 28d, and consistency across all tested QSARs	UBA: M EC: Not M exp log Koc=3.1	(StotRE_MinorOpinion)	< 10	DW: - GW: - RW: - BF: - SW: max 10 ng/L (S01) WTPE: -
207-08-9	-	Benzo[k]fluoranthene		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 10 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
114-26-1	-	Propoxur		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 10 ng/L (S01) WTPE: -
99-88-7	202-797-2	4-isopropylaniline		vPvM & PMT	vPvM & PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 65d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: vM EC: vM exp log Koc=1.7	(Ecotox_PMT20 19)	< 10	DW: - GW: - RW: - BF: - SW: max 10 ng/L (S01) WTPE: -
64520-05-4	-	10-Hydroxy-amitriptyline		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 9 ng/L (S01) WTPE: -
91-53-2	202-075-7	Ethoxyquin		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 65d	UBA: vM EC: M min Dow=1.8 (2a)	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 9 ng/L (S01) WTPE: -
142-78-9	205-560-1	N-(2-hydroxyethyl)dodecanamide		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): EPA OPPTS 835.3110 (Ready Biodegradability) January 1998; EU Method C.4-C (Determination of the "Ready" Biodegradability - Carbon Dioxide Evolution Test) Commission Regulation (EC) No. 440/2008; OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test) 1992	UBA: Pot. M/vM EC: Not M min Dow=3.8 (2a)	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 9 ng/L (S01) WTPE: -
4184-79-6	-	5,6-dimethyl-1H-benzotriazole (XTri)		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 9 ng/L (S01,S03) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
120-51-4	204-402-9	Benzyl benzoate		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test); EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test)	UBA: M EC: Not M exp log Koc=3.8	(PBT_MinorityOpinion)	> 10	DW: - GW: - RW: - BF: - SW: max 9 ng/L (S01) WTPE: -
90-15-3	201-969-4	1-naphthol		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test) Version 1992. Ready Biodegradability: CO2 Evolution (Modified Sturm Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test) Version 1992. Ready Biodegradability: CO2 Evolution (Modified Sturm Test)	UBA: vM EC: M exp log Koc=2.3	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 9 ng/L (S01) WTPE: -
208465-21-8	-	Mesosulfuron-methyl		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 9 ng/L (S01) WTPE: -
19666-30-9	-	Oxadiazon		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 9 ng/L (S01) WTPE: -
124-94-7	-	Triamcinolone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 8 ng/L (S06) WTPE: -
92-52-4	202-163-5	Biphenyl		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready	UBA: vM EC: M exp log Koc=2.9	(PBT_UnderAssess)(Ecotox_Envirotox)	> 10	DW: - GW: - RW: - BF: - SW: max 8 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						Biodegradability: Manometric Respirometry Test)				
5436-43-1	-	PBDE 47		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 8 ng/L (S01) WTPE: -
189084-62-6	-	PBDE 71		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 8 ng/L (S01) WTPE: -
110235-47-7	432-140-7	4-methyl-N-phenyl-6-(prop-1-yn-1-yl)pyrimidin-2-amine		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 122d	UBA: M EC: Pot. M/vM min Dow=2.9 (2a)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 8 ng/L (S01) WTPE: -
676228-91-4	-	Thiacloprid amide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 8 ng/L (S01) WTPE: -
1806-98-0	-	17-beta-estradiol-17-glucuronide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 7 ng/L (S06,S01) WTPE: -
100643-71-8	-	Desloratadine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 7 ng/L (S01) WTPE: -
962-58-3	-	Diazinon-oxon		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 7 ng/L (S01) WTPE: -
-	TP of: 254-487-1 237-525-1 441-070-6 407-980-2	3-Phenoxybenzoate	(t1)254-487-1; (t1-1)237-525-1; (t1-1)441-070-6; (t1)407-980-2	insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 18d	UBA: vM EC: vM min Dow=-0.4 (2b)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 7 ng/L (S01) WTPE: -
23887-31-2	-	Clorazepate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 7 ng/L (S01) WTPE: -
68157-60-8	-	Forchlorfenuron		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 7 ng/L (S01) WTPE: -
1570-64-5	216-381-3	4-chloro-o-cresol		<b>vPvM &amp; PMT</b>	<b>PMT</b>	Potential P/vP++: estimated t1/2 (error factor 10) = 29d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)	UBA: vM EC: M exp log Koc=2.2	(Pro.S.P._ED)	< 10	DW: - GW: - RW: - BF: - SW: max 7 ng/L (S01) WTPE: -
91-44-1	202-068-9	7-(diethylamino)-4-methyl-2-benzopyrone		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: weight-of-evidence (this study) based on all known QSARs and no biodeg. observed in majority of biodegradation screen tests, e.g. OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: vM EC: M exp log Koc=2.2	-	> 10	DW: - GW: - RW: - BF: - SW: max 7 ng/L (S01) WTPE: -
6988-21-2	-	Dioxcarb		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 7 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
26530-20-1	247-761-7	octhilinone (ISO); 2-octyl-2H-isothiazol-3-one		insufficient data	insufficient data	no conclusion/data: no data	UBA: vM EC: vM exp log Koc=1.3	-	< 10	DW: - GW: - RW: - BF: - SW: max 7 ng/L (S01) WTPE: -
114369-43-6	406-140-2	4-(4-chlorophenyl)-2-phenyl-2-[(1H-1,2,4-triazol-1-yl)methyl]butanenitrile		Not PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 287d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: Not M EC: Not M min Dow=6.0 (2a)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 6 ng/L (S01) WTPE: -
359-83-1	-	Pentazocine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 6 ng/L (S01) WTPE: -
402-45-9	-	4-(Trifluoromethyl)phenol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 6 ng/L (S01) WTPE: -
3878-19-1	-	Fuberidazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 6 ng/L (S01) WTPE: -
95-53-4	202-429-0	o-toluidine		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test); OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)	UBA: vM EC: vM exp log Koc=1.9	(SVHC: Carcinogenic (Article 57a))(Carc1ab)(SINlist: Classified CMR according to Annex VI of Regulation 1272/2008)	> 10	DW: - GW: - RW: - BF: - SW: max 6 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
77-73-6	201-052-9	3a,4,7,7a-tetrahydro-4,7-methanoindene		PM	PM	Potential P/vP++: estimated t1/2 (error factor 10) = 26d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: vM EC: M exp log Koc=2.5	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 6 ng/L (S01) WTPE: -
101-21-3	-	Chlorpropham		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 6 ng/L (S01) WTPE: -
466-99-9	-	Hydromorphone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 5 ng/L (S01) WTPE: -
90717-03-6	402-790-6	7-chloro-3-methylquinoline-8-carboxylic acid		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 43d	UBA: vM EC: vM min Dow=-0.6 (2b)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 5 ng/L (S01) WTPE: -
28343-61-5	-	Chlorothalonil-4-hydroxy		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 5 ng/L (S01) WTPE: -
116-29-0	-	Tetradifon		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 5 ng/L (S01) WTPE: -
17109-49-8	-	Edifenphos		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 5 ng/L (S01) WTPE: -
2592-95-2	219-989-7	1-hydroxybenzotriazole		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 33d	UBA: vM EC: vM exp log Koc=0.5	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: max 5 ng/L (S01) WTPE: -
479-13-0	-	Coumesterol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 5 ng/L (S01) WTPE: -
149979-41-9	-	Tepraloxydim		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 5 ng/L (S01) WTPE: -
67018-85-3	-	Norverapamil		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 5 ng/L (S01) WTPE: -
60168-88-9	-	Fenarimol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 5 ng/L (S01) WTPE: -
19044-88-3	-	Oryzalin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 5 ng/L (S01) WTPE: -
529-38-4	-	Cocaethylene		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: -



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 5 ng/L (S01) WTPE: -
209414-07-3	-	JWH-018		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 5 ng/L (S01) WTPE: -
957-51-7	-	Diphenamid		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 5 ng/L (S01) WTPE: -
14214-32-5	-	Difenoxuron		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 5 ng/L (S01) WTPE: -
55285-14-8	-	Carbosulfan		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 4 ng/L (S01) WTPE: -
60348-60-9	-	PBDE 99		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 4 ng/L (S01) WTPE: -
71758-44-6	-	2-(2-(Chlorophenyl)amino)benzaldehyde		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 4 ng/L (S01) WTPE: -
87820-88-0	-	Tralkoxydim 1		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 4 ng/L (S01) WTPE: -
79277-27-3	-	Thifensulfuron-methyl		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 4 ng/L (S01) WTPE: -
103-33-3	-	Azobenzene		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 4 ng/L (S01) WTPE: -
216667-08-2	-	Amidosulfobetaine-14		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 4 ng/L (S01) WTPE: -
105-67-9	203-321-6	2,4-xylenol	(p)203-321-6; (s1)447-750-9; (p)905-287-4; (s5)284-895-5	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: vM EC: vM exp log Koc=1.6	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: max 4 ng/L (S01) WTPE: -
52-01-7	-	Spironolactone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 4 ng/L (S06) WTPE: -
208-96-8	-	Acenaphthylene		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 4 ng/L (S01) WTPE: -
2479-90-5	-	Estrone glucuronide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 4 ng/L (S01) WTPE: -
92-67-1	-	4-Aminodiphenyl		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 4 ng/L (S01) WTPE: -
7681-76-7	-	Ronidazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 4 ng/L (S06) WTPE: -
66-28-4	-	Strophanthidin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 4 ng/L (S01) WTPE: -
60282-87-3	-	Gestoden		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 4 ng/L (S01) WTPE: -
6923-22-4	-	Monocrotophos		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 4 ng/L (S01) WTPE: -
119168-77-3	-	Tebufenpyrad		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 4 ng/L (S01) WTPE: -
13071-79-9	-	Terbufos		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 4 ng/L (S01) WTPE: -
37115-43-8	-	alpha-Hydroxyalprazolam		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 4 ng/L (S01) WTPE: -
26538-44-3	-	A-zearalanol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 3 ng/L (S01) WTPE: -
69610-10-2	-	MDMA / Methylendioxyamphetamine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 3 ng/L (S01) WTPE: -
10161-33-8	-	Trenbolone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 3 ng/L (S01) WTPE: -
1852-50-2	-	Estriol-16-glucuronide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 3 ng/L (S06) WTPE: -
68-96-2	-	21-alpha-hydroxyprogesterone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 3 ng/L (S06) WTPE: -
1852-43-3	-	Androsterone-glucuronide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 3 ng/L (S01) WTPE: -
112830-95-2	-	HU-210		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 3 ng/L (S01) WTPE: -
7082-99-7	-	Chlorbenside sulfone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 3 ng/L (S01) WTPE: -
205650-65-3	-	Fipronil desulfinyl		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 3 ng/L (S01) WTPE: -
28291-75-0	-	N-cyclohexyl-2-benzothiazole-amine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 2 ng/L (S01) WTPE: -
82801-81-8	-	MDEA / 3,4-Methylenedioxyethamphetamine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 2 ng/L (S01) WTPE: -
5234-68-4	-	Carboxin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 2 ng/L (S01) WTPE: -
3734-33-6	223-095-2	Denatonium benzoate		Potential PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 106d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation	UBA: M EC: Not M exp log Koc=3.4	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						screen tests, e.g. OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)				SW: max 2 ng/L (S01) WTPE: -
25451-15-4	-	Felbamate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 2 ng/L (S01) WTPE: -
91465-08-6	-	Cyhalothrin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 2 ng/L (S01) WTPE: -
521-35-7	-	CBN / Cannabinol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 2 ng/L (S01) WTPE: -
82-68-8	-	Pentachloronitrobenzene		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 2 ng/L (S01) WTPE: -
117704-25-3	-	Doramectin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 2 ng/L (S06) WTPE: -
1180-25-2	-	Testosterone glucuronide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 2 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
2479-86-9	-	Androsterone sulfate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 2 ng/L (S01) WTPE: -
10418-03-8	-	Stanozolol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 2 ng/L (S06) WTPE: -
7786-34-7	-	Mevinphos		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 2 ng/L (S01) WTPE: -
34205-21-5	-	Dimefuron		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 2 ng/L (S01) WTPE: -
5495-84-1	226-827-9	2-isopropyl-9H-thioxanthen-9-one		insufficient data	insufficient data	no conclusion/data: no data	UBA: M EC: Not M exp log Koc=4.0	-	> 10	DW: - GW: - RW: - BF: - SW: max 2 ng/L (S01) WTPE: -
61676-87-7	-	Cymiazole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 2 ng/L (S01) WTPE: -
34084-50-9	-	7-Aminoflunitrazepam		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 2 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
94-24-6	-	Tetracaine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 2 ng/L (S01) WTPE: -
2479-91-6	-	Estriol-3-glucuronide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 ng/L (S01) WTPE: -
120-32-1	204-385-8	Clorofene		Potential PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 59d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. EU Method C.4-C (Determination of the "Ready" Biodegradability - Carbon Dioxide Evolution Test) 92/69/EC; OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test) 1992; EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test) 1992; OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test) 1992	UBA: Pot. M/vM EC: Not M min Dow=4.1 (2a)	(Carc2)(Rep2)	< 10	DW: - GW: - RW: - BF: - SW: max 1 ng/L (S01) WTPE: -
6104-71-8	-	N-Desmethylozapine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 ng/L (S01) WTPE: -
2631-37-0	-	Promecarb		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 ng/L (S01) WTPE: -
4394-00-7	224-516-2	Niflumic acid		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 310d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: M exp log Koc=2.5	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: -



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 1 ng/L (S06) WTPE: -
481-95-8	-	Estriol-3-sulfate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 ng/L (S01) WTPE: -
564-35-2	-	11-Ketotestosterone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 ng/L (S01) WTPE: -
189084-64-8	-	PBDE 100		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 ng/L (S01) WTPE: -
24560-70-1	-	Ethinylestradiol-3-sulfate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 ng/L (S01) WTPE: -
77-10-1	-	PCP / Phencyclidine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 ng/L (S01) WTPE: -
175217-20-6	-	Silthiopham		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 ng/L (S01) WTPE: -
42028-21-7	-	Estriol-17-sulfate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 1 ng/L (S01) WTPE: -
82097-50-5	-	Triasulfuron		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 ng/L (S01) WTPE: -
5355-16-8	-	Diaveridin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 ng/L (S01) WTPE: -
673-04-1	-	Simeton		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 ng/L (S01) WTPE: -
90566-53-3	-	Fluticasone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 ng/L (S06) WTPE: -
68359-37-5	-	Cyfluthrin I		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 ng/L (S01) WTPE: -
31508-00-6	-	PCB118		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 ng/L (S01) WTPE: -
35065-28-2	-	PCB138		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										SW: max 1 ng/L (S01) WTPE: -
2955-38-6	-	Prazepam		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 1 ng/L (S06) WTPE: -
32598-11-1	-	PCB #70		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 0 ng/L (S01) WTPE: -
37680-73-2	-	PCB101		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 0 ng/L (S01) WTPE: -
13560-89-9	236-948-9	1,6,7,8,9,14,15,16,17,17,18,18-dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene		Not PMT/vPvM	Not PMT/vPvM	VP: on SVHC list - vPvB substance	UBA: Not M EC: Not M min Dow=11.3 (2a)	(SVHC: vPvB (Article 57e))(SINlist: Identified as vPvB for the REACH Candidate List. This substance has persistent, bioaccumulative and toxic properties. It has been detected in environmental and human samples and estimated and experimental data show P, B and T properties.)	> 10	DW: - GW: - RW: - BF: - SW: max 0 ng/L (S01) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
66085-59-4	-	Nimodipine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: max 0 ng/L (S06,S03) WTPE: -
101-77-9	202-974-4	4,4'-methylenedianiline		Potential PMT/vPvM	Not PMT/vPvM	Pot. P/vP: P data for this substance is variable and difficult to conclude (see e.g. Berger et al. (2018)); however, its identification in monitoring studies in monitoring studies (Schulze et al. 2019) indicates it is persistent enough to be considered potentially P/vP	UBA: M EC: Not M exp log Koc=3.8	(SVHC: Carcinogenic (Article 57a))(Carc1ab)(Mut2)(Ecotox_P MT2019)(SINlist : Classified CMR according to Annex VI of Regulation 1272/2008)(Pro. S.P._ED)	> 10	DW: - GW: - RW: - BF: - SW: detected (S02) WTPE: -
102-71-6	203-049-8	2,2',2''-nitrioltriethanol	(p)203-049-8; (s1)233-175-9; (s1)240-015-1; (s1)270-982-5; (p)273-224-1; (s1)309-811-7; (p)500-094-8; (s1)605-047-6; (p)905-898-6; (s2)230-989-6; (s2)238-015-1; (s2)241-727-5; (s2)245-327-1; (s2)248-107-3; (s2)249-576-7; (s2)259-470-2; (s2)264-867-9; (s2)265-016-4; (s2)265-314-4; (s2)269-084-6; (s2)279-255-7; (s2)279-506-0; (s2)285-132-9; (s2)301-097-5; (s1)211-284-2;	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test) precursor of OECD TG 301 E; OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test) precursor of OECD TG 301 E	UBA: vM EC: vM exp log Koc=-1.9	-	> 10	DW: - GW: - RW: - BF: - SW: detected (S04) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
			(s1)238-874-2; (s2)421-440-3; (s2)701-138-0							
1137-42-4	214-507-1	4-hydroxybenzophenone		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test) adopted July 17, 1992	UBA: vM EC: vM exp log Koc=-1.9	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: detected (S03) WTPE: -
1143-72-2	214-540-1	2,3,4-trihydroxybenzophenone		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 32d	UBA: vM EC: M min Dow=1.3 (2b)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: detected (S03) WTPE: -
122-20-3	204-528-4	1,1',1''-nitrotripropan-2-ol	(p)204-528-4; (s1)427-360-5	PM	PM	Potential P/vP++: estimated t1/2 (error factor 10) = 16d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 A (Ready Biodegradability: DOC Die Away Test); OECD Guideline 301 A (Ready Biodegradability: DOC Die Away Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: vM EC: vM exp log Koc=-0.9	-	> 10	DW: - GW: - RW: - BF: - SW: detected (S04) WTPE: -
2403-88-5	219-291-2	2,2,6,6-tetramethylpiperidin-4-ol		PM	PM	Potential P/vP++: estimated t1/2 (error factor 10) = 32d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: vM EC: vM min Dow=-2.7 (2a)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: detected (S04) WTPE: -
3965-55-7	223-578-8	Sodium dimethyl 5-sulphonatoisophthalate		PM	PM	P: All biodegradation results in 301C and 302B tests imply no significant biodegradation. Therefore, this substance is assessed to be persistent in water. (Berger et al. 2018)	UBA: vM EC: vM min Dow=-2.9 (2a)	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: detected (S02) WTPE: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
497-18-7	207-837-2	Carbonohydrazide		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 75d, and consistency across all tested QSARs	UBA: vM EC: vM exp log Koc=1.3	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: detected (S02) WTPE: -
50-02-2	200-003-9	Dexamethasone		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 215d, and BOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: M min Dow=1.7 (2a)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: detected (S03) WTPE: -
52556-42-0	258-004-5	Sodium 3-(allyloxy)-2-hydroxypropanesulphonate		vPvM	vPvM	Potential P/vP++: estimated t1/2 (error factor 10) = 34d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation screen tests, e.g. OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: vM EC: vM min Dow=-1.5 (2a)	Cramer Cl.III	> 10	DW: - GW: - RW: - BF: - SW: detected (S02) WTPE: -
62-49-7	200-535-1	Choline	(p)200-535-1; (s1)200-655-4; (s1)201-137-0; (s1)204-625-1; (s2)201-068-6	Not PMT/vPvM	Not PMT/vPvM	Not P: estimated t1/2 (error factor 10) = 12d, and consistency across all tested QSARs	UBA: vM EC: vM exp log Koc=-2.6	(Rep_BroadConsensus)	< 10	DW: - GW: - RW: - BF: - SW: detected (S04) WTPE: -
6331-96-0	700-413-2	2-amino-4,5-dichlorobenzenesulfonic acid		vPvM & PMT	vPvM & PMT	Potential P/vP++: estimated t1/2 (error factor 10) = 334d, found in several water samples in Schulze et al. (2019) and consistent indications of P across tested QSARs	UBA: vM EC: vM min Dow=-1.0 (2b)	(Pro.S.P._ED)	> 10	DW: - GW: - RW: - BF: - SW: detected (S02) WTPE: -
73-40-5	200-799-8	Guanine		insufficient data	insufficient data	no conclusion/data: no data	UBA: vM EC: vM exp log Koc=-1.3	-	< 10	DW: - GW: - RW: - BF: - SW: detected (S04) WTPE: -
75277-39-3	278-169-7	Sodium 4-(2-hydroxyethyl)piperazine-1-ylethanesulphonate		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 86d, weight-of-evidence (this study) based on all known QSARs and majority of biodegradation	UBA: vM EC: vM min Dow=-3.9 (2b)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
						screen tests, e.g. OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)				SW: detected (S02) WTPE: -
81-14-1	201-328-9	4'-tert-butyl-2',6'-dimethyl-3',5'-dinitroacetophenone		Potential PMT/vPvM	Not PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 321d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: Pot. M/vM EC: Not M min Dow=4.2 (2a)	(Carc2)	> 10	DW: - GW: - RW: - BF: - SW: detected (S03) WTPE: -
83-43-2	201-476-4	Methylprednisolone		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 149d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: vM EC: vM exp log Koc=0.9	(Rep_BroadConsensus)	< 10	DW: - GW: - RW: - BF: - SW: detected (S03) WTPE: -
846-48-0	212-686-0	Boldenone	(p)212-686-0; (t2)200-370-5	Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test); OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)	UBA: vM EC: M min Dow=2.3 (2a)	(Rep_BroadConsensus)(Pro.S.P._ED)	< 10	DW: - GW: - RW: - BF: - SW: detected (S03) WTPE: -
1241-94-7	214-987-2	2-ethylhexyl diphenyl phosphate		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): EU Method C.4-E (Determination of the "Ready" Biodegradability - Closed Bottle Test); EU Method C.4-E (Determination of the "Ready" Biodegradability - Closed Bottle Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test); OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)	UBA: Not M EC: Not M min Dow=5.6 (2a)	(Ecotox_PMT2019)	> 10	DW: - GW: - RW: - BF: - SW: - WTPE: max 5 400 ng/L (W08)
68-89-3	-	Metamizole		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 4 900 ng/L (W12)
74103-06-3	616-049-1	5-benzoyl-2,3-dihydro-1H-pyrrolo[1,2-		insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 23d	UBA: vM EC: vM exp log Koc=1.7	Cramer Cl.III	< 10	DW: - GW: - RW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
		a]pyrrole-1-carboxylic acid								BF: - SW: - WTPE: max 4 035 ng/L (W12,W04,W10)
113-59-7	-	Chlorprothixene		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 2 780 ng/L (W12)
73384-59-5	-	Ceftriaxone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 2 030 ng/L (W12)
148553-50-8	-	Pregabalin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 1 242 ng/L (W12)
519-98-2	-	4-methylaminoantipyrine (4-MAA)		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 1 098 ng/L (W10)
1622-61-3	-	Clonazepam		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 437 ng/L (W08)
56980-93-9	-	Celiprolol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 433 ng/L (W12,W04)
303-81-1	-	Novobiocin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: -



Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										RW: - BF: - SW: - WTPE: max 330 ng/L (W12)
129-03-3	-	Cyproheptadine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 325 ng/L (W08)
97240-79-4	-	Topiramate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 201 ng/L (W12)
16051-77-7	-	Isosorbide mononitrate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 180 ng/L (W12)
10262-69-8	-	Maprotiline		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 165 ng/L (W08)
71486-22-1	-	Vinorelbine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 112 ng/L (W12)
43200-80-2	-	Zopiclone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 87 ng/L (W12)
38649-73-9	-	Talinolol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										RW: - BF: - SW: - WTPE: max 53 ng/L (W12)
35607-66-0	-	Cefoxitin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 50 ng/L (W12)
93479-97-1	-	Glimepiride		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 39 ng/L (W12)
120014-06-4	-	Donepezil		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 32 ng/L (W12)
23214-92-8	-	Doxorubicin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 31 ng/L (W12)
58581-89-8	-	Azelastine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 30 ng/L (W12)
773058-82-5	415-180-1	Mono-2-[2-(4-dibenzo[b,f][1,4]thiazepin-11-yl)piperazinium-1-yl]ethoxyethanol trans-butenedioate	(s1)415-180-1; (s1)616-449-6	insufficient data	insufficient data	no conclusion/data: only limited QSAR data, estimated t1/2 (error factor 10) = 154d	UBA: vM EC: vM exp log Koc=1.8	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: - WTPE: max 29 ng/L (W12)
848-75-9	-	Lormetazepam		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										RW: - BF: - SW: - WTPE: max 25 ng/L (W12)
5250-39-5	-	Flucloxacillin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 23 ng/L (W12)
965-52-6	-	Nifuroxazide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 22 ng/L (W12)
36322-90-4	-	Piroxicam		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 21 ng/L (W12)
1400-61-9	-	Nystatin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 17 ng/L (W12)
58-39-9	-	Perphenazine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 17 ng/L (W12)
72509-76-3	-	Felodipine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 17 ng/L (W12)
100286-90-6	-	Irinotecan		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										RW: - BF: - SW: - WTPE: max 17 ng/L (W12)
1330-78-5	809-930-9	Tris(methylphenyl) phosphate		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I)); OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))	UBA: Not M EC: Not M exp log Koc=4.3	(PBT_UnderAssess)(Ecotox_PMT2019)	> 10	DW: - GW: - RW: - BF: - SW: - WTPE: max 13 ng/L (W08)
77-19-0	201-009-4	Dicycloverine		Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 91d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: M EC: Pot. M/vM min Dow=1.3 (2c)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: - WTPE: max 12 ng/L (W12)
979-32-8	-	Estradiol-17-valerate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 11 ng/L (W12)
53772-83-1	-	Zuclopenthixol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 11 ng/L (W12)
6452-71-7	-	Oxprenolol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 11 ng/L (W12)
13292-46-1	-	Rifampicin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 9 ng/L (W12)
139-91-3	-	Furaltadone		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										RW: - BF: - SW: - WTPE: max 9 ng/L (W12)
2152-44-5	-	Betamethasone 17-Valerate		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 8 ng/L (W12)
25614-03-3	-	Bromocriptine		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 6 ng/L (W12)
25122-46-7	-	Clobetasol		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 5 ng/L (W12)
3572-43-8	222-684-1	Bromhexine	(p)222-684-1; (s1)617-191-7	Potential PMT/vPvM	Potential PMT/vPvM	Pot. P/vP: estimated t1/2 (error factor 10) = 421d, and BIOWIN screen tool as recommended in the PBT guideline	UBA: M EC: Pot. M/vM min Dow=0.9 (2c)	Cramer Cl.III	< 10	DW: - GW: - RW: - BF: - SW: - WTPE: max 4 ng/L (W12)
4247-02-3	224-208-8	Isobutyl 4-hydroxybenzoate		Not PMT/vPvM	Not PMT/vPvM	Not P: Not P (readily biodeg): OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test) 1992	UBA: M EC: Pot. M/vM min Dow=2.3 (2b)	-	< 10	DW: - GW: - RW: - BF: - SW: - WTPE: max 4 ng/L (W12)
33419-42-0	-	Etoposide		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 3 ng/L (W12)
33069-62-4	-	Paclitaxel		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: -

Cas No.	EC No.	Name	Other REACH substances & precursors <sup>1</sup>	UBA PMT/vPvM conclusion	EC Prop. PMT/vPvM conclusion	P Rationale	M Rationale	T Rationale	REACH tpa	Detection (ref index)
										RW: - BF: - SW: - WTPE: max 2 ng/L (W12)
647-29-0	-	PFOSi		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 1 ng/L (W01)
106133-20-4	-	Tamsulosin		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 1 ng/L (W12)
72629-94-8	-	PFTriDA		Not REACH	Not REACH	n.a.	n.a.	n.a.	n.a.	DW: - GW: - RW: - BF: - SW: - WTPE: max 0 ng/L (W01)

### 3.2 Detected substances registered under REACH

The total numbers of unique chemical structures detected in each of the six water media considered are compared to the proportion of these that are REACH registered substances in Table 4.

**Table 4:** The total number of unique chemical structures detected in each considered water media, the proportion of them that are REACH registered substance, and the proportion of those with registration volumes > 10 tpa.

Water Media	Total number of unique chemical structures detected	Proportion of detected REACH registered substances	Proportion of REACH registered substances with registration volumes > 10 tpa
Wastewater t.p.e. (WTPE)	442	143 of 442 (32%)	30 of 143 (21%)
Surface water (SW)	1021	387 of 1021 (38%)	172 of 387 (44%)
Bank filtrate (BF)	114	60 of 114 (53%)	25 of 60 (42%)
Groundwater (GW)	338	165 of 338 (49%)	80 of 165 (48%)
Raw water (RW)	212	125 of 212 (59%)	64 of 125 (51%)
Drinking water (DW)	385	186 of 385 (48%)	90 of 186 (48%)
all six water media considered (WTPE, SW, BF, GW, RW, DW)	1289	509 of 1289 (39%)	229 of 509 (45%)
only DW relevant media (BF, GW, RW, DW)	639	311 of 639 (49%)	147 of 311 (47%)

The fraction of detected substances registered under REACH were the lowest in SW (only 32%) and in WTPE (only 38%). One reason could be a sampling bias, as sampling campaigns in SW and in WTPE may be more focussed on pharmaceuticals and pesticides. This seems to be the case from a visual inspection of the substances exclusively detected in SW and WTPE listed at the bottom of Table 3. A closer examination with a comparison to pharmaceutical, biocidal or agricultural product register would be needed to confirm this hypothesis.

REACH registered substances are a major source of the substances detected in DW relevant media. Across all six water media considered, 39% (509 of 1289) of detected substances were registered under REACH, while in the four DW relevant media (BF, GW, RW and DW) as many as 49% (311 of 639) of detected substances were registered under REACH.

Table 4 also presents the proportion of the detected unique chemical structures from the REACH registration database with registration volumes > 10 tpa (as of September 2019). It may be expected that the higher the production volume, the more likely the substance would be detected in the environment.

Here, just under half, or 49% of detected REACH registered substances in the four DW relevant media were found with registration volumes > 10 tpa. For SW and WTPE media the corresponding percentages were 44% and 21%, respectively. This may seem counterintuitive to the above expectation that the higher the production volume the higher the chance of emissions and thus detection in the environment. There are several potential explanations for this. The main explanation being that persistent and mobile substances can appear in drinking water sources even when they are emitted at low levels. A second explanation may be related to the fact that environmental detections can be a trigger for emission reductions or for the imposition of regulations. This has been the case for perfluorocarboxylates (Wang et al., 2014). In this case, detected substances that did not have registration volumes > 10 tpa in 2019, may have had so in previous years. A third explanation is that some uses are associated with broad emissions, even at low tonnages. For instance, substances in products that are poured down the drain (e.g. detergents) or that commonly occur in consumer products have a greater chance of being detected in the environment (Schulze et al., 2018). A fourth explanation is that non-industrial uses of REACH registered substances, such as uses as pharmaceutical and pesticide, may also be contributing to emissions.

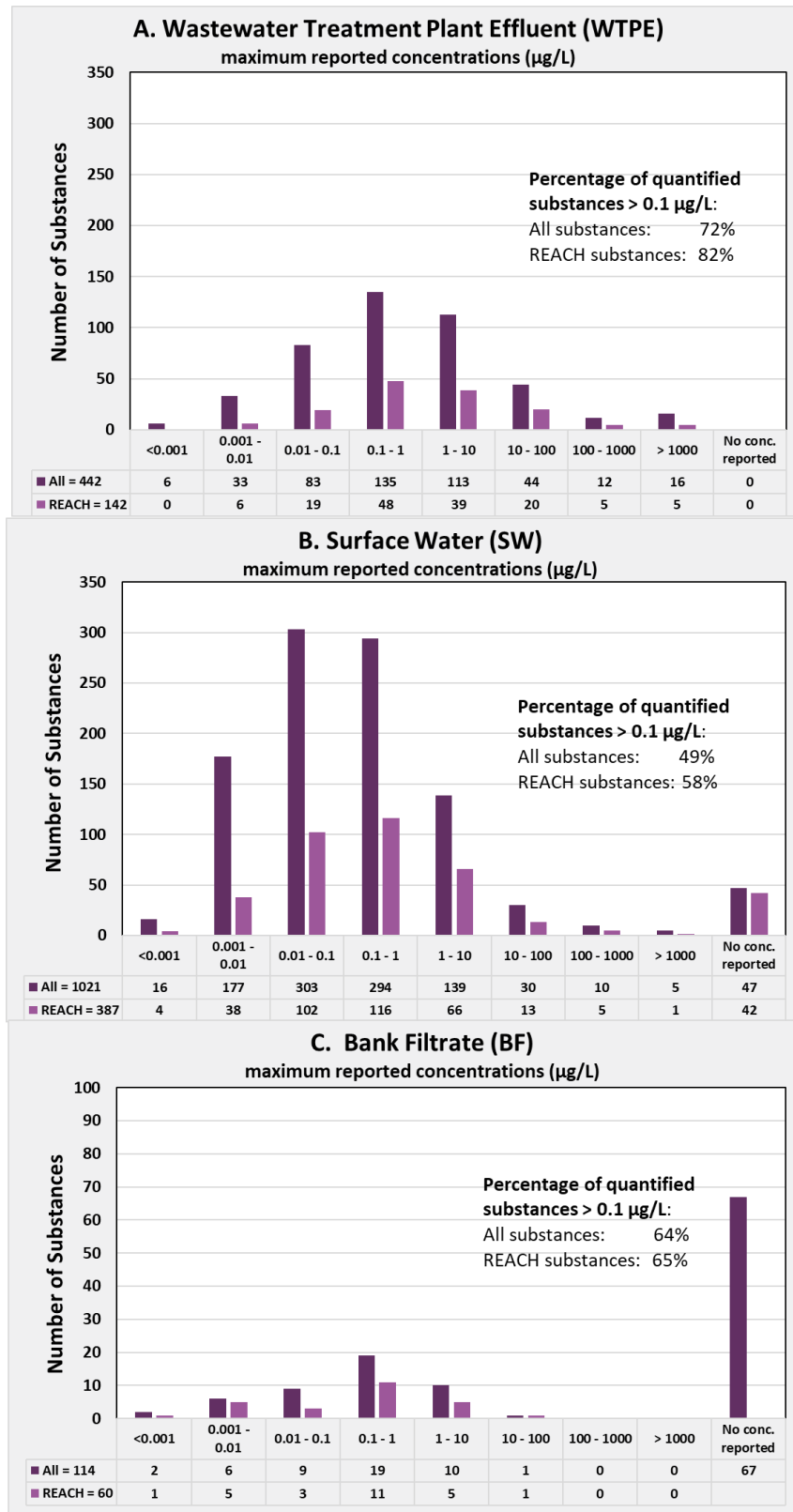
The distribution of the maximum concentrations in the six water media considered are presented in a series of six histograms in Figure 1. Each of these presents the number of all unique chemical structures detected (dark purple), and the number all unique chemical structures that are also REACH registered (light purple), plotted according to the maximum detected concentrations. The inlays present the percentage of substances with concentrations exceeding 0.1 µg/L, which is a commonly used threshold concentration, such as in the drinking water directive (EU Regulation 98/83/EC) for pesticides.

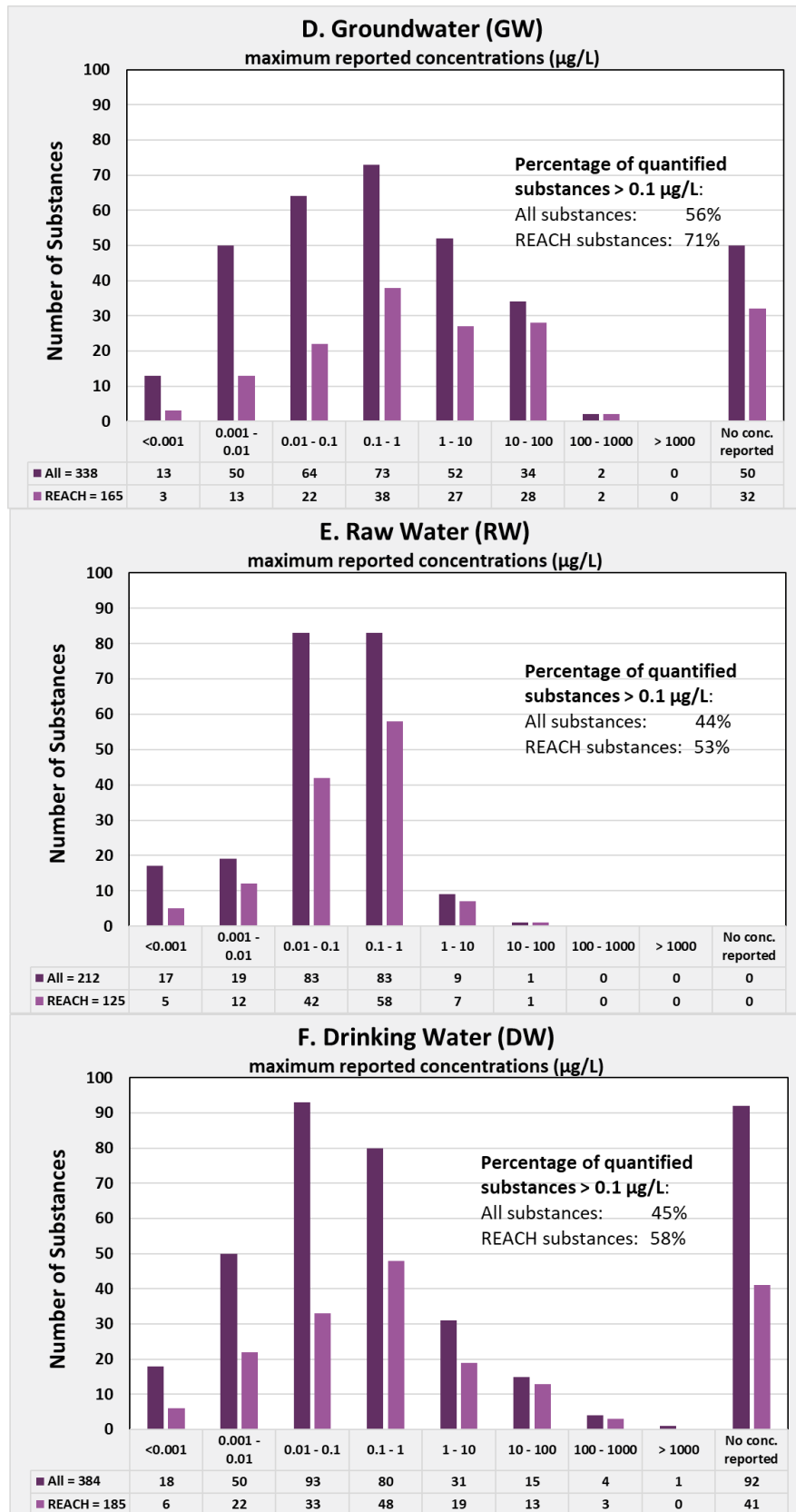
For all six water media considered, the REACH registered substances had a higher chance of being present at > 0.1 µg/L. For unique chemical structures quantified at > 0.1 µg/L in WTPE, this applied to 117 of 142 (82%) of REACH registered substances compared to 203 of 300 (68%) that were not REACH registered (Figure 1a). For substances quantified in SW at > 0.1 µg/L, this applied to 201 of 345 (58%) of REACH registered substances, compared to 277 of 629 (44%) that were not REACH registered (Figure 1b). For substances quantified in BF at > 0.1 µg/L, this applied to 17 of 26 (65%) of REACH registered substances compared to 13 of 21 (62 %) that were not REACH registered (Figure 1c). There were many non-quantifiable substances in BF due to them being identified but not quantified through use of non-target analysis (Albergamo et al., 2019). For substances quantified in GW at > 0.1 µg/L, this applied to 95 of 133 (71%) of REACH registered substances compared to 66 of 155 (43%) that were not REACH registered (Figure 1d). For substances quantified RW at > 0.1 µg/L, this applied to 66 of 125 (53%) of REACH registered substances compared to 27 of 87 (31%) that were not REACH registered (Figure 1e). Finally, for substances quantified in DW at > 0.1 µg/L, this applied to 83 of 144 (58%) of REACH registered substances with concentrations > 0.1 µg/L, compared to 48 of 148 (32%) that were not REACH registered (Figure 1f). In total, this shows that REACH registered substances have a higher chance of being detected in higher concentrations than non-REACH registered substances.



**Figure 1.** Number of substances detected in a) wastewater treatment plant effluent (WTPE), b) surface water (SW) and c) bank filtrate (BF), d) groundwater (GW), e) raw water (RW) and f) drinking water (DW)

The histograms are organized for specified concentration intervals, referring to the maximum detected concentration from the literature review. The number of all detected unique chemical structures with a maximum detected concentration falling within a specified range is shown in dark purple and just those that are REACH registered are shown in light purple.





Source: Original Figure

### 3.3 Polarity and ionizability

Mobile substances are mobile because they have a higher affinity for water than soil. This can be because they are either very small molecules (e.g. carbon dioxide) or because they are larger but are polar, ionizable or ionic, and therefore, hydrophilic. The sorption behaviour of ionic and ionizable substances can be complex and highly variable (Sigmund et al., 2022). It is therefore, of interest to see how many of the substances detected in the environment are polar, ionizable or ionizable. The unique chemical structures identified in the REACH registration database (n = 12960) from Arp and Hale (2023), their known transformation products (n = 597), the detected REACH registered substances in all six water media considered (n = 509), and the detected REACH registered substances in the four DW relevant media (n=311) were categorized in terms of their polarity and ionizability. The results are presented in Table 5 and

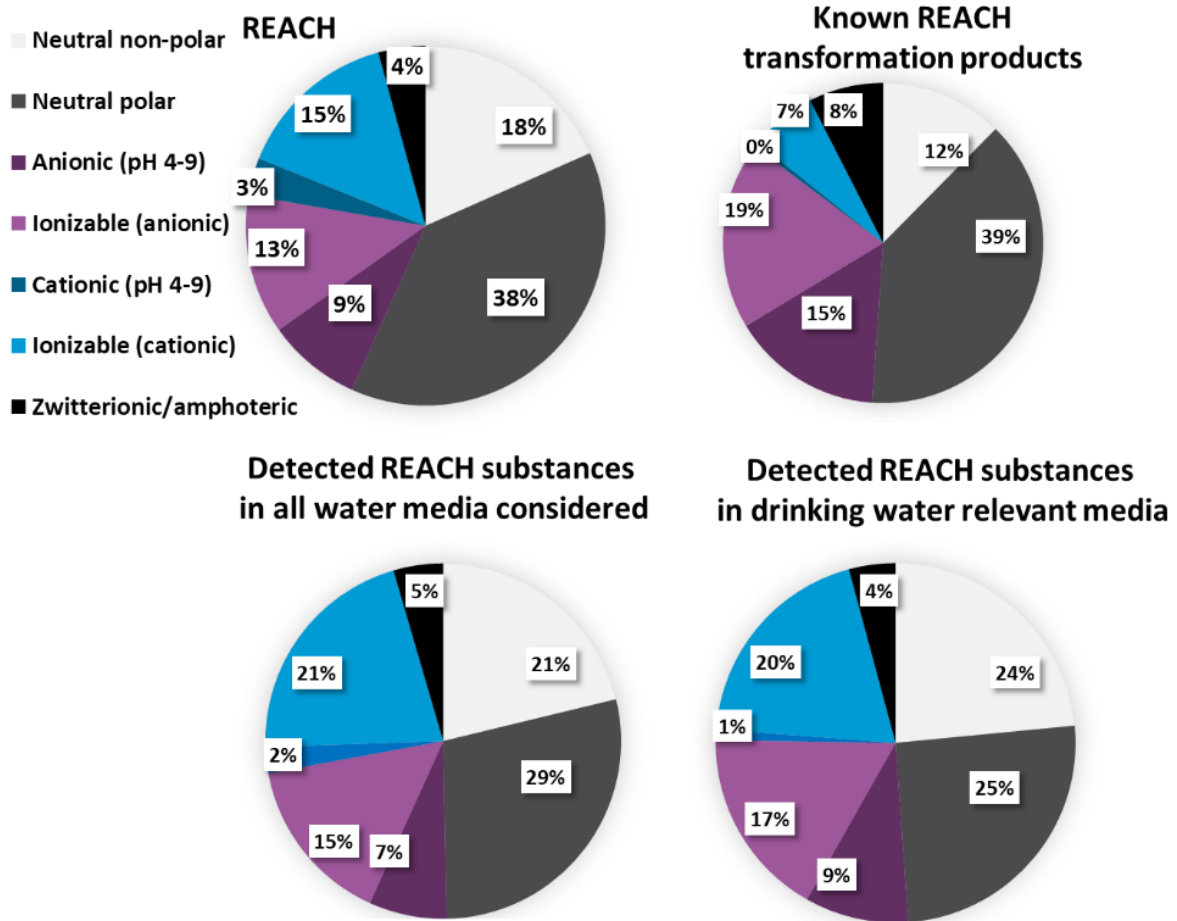
Figure 2.

**Table 5: Polarity and ionizability categories of unique chemical structures registered under REACH.**

Category	REACH registration database (as of September 2019)		Detected REACH registered substances	
	without transformation products	only transformation products	all six water media	only DW relevant media
All unique chemical structures	12960	597	509	311
Neutral non-polar	2381	74	108	73
Neutral polar	4970	231	145	79
Anionic (pH 4-9)	1096	91	36	29
Ionizable (transitions anionic)	1629	113	78	53
Cationic (pH 4-9)	438	3	12	3
Ionizable (transitions cationic)	1897	40	107	61
Zwitterionic/amphoteric	549	45	23	13

**Figure 2.** Distribution of polarity and ionizability for the identified chemical structures

Data is presented for REACH registered substances (n = 12960), their known transformation products (n=597), detected REACH registered substances in all six water media considered (WTPE, SW, BF, GW, RW,DW) (n=509), and detected REACH registered substances in the four DW relevant media (BF, GW, RW, DW) (n=311)



Source: Original Figure, based on Arp & Hale (2022)

The results in Table 5 and

Figure 2 show that

Figure 2. Distribution of polarity and ionizability for the identified chemical structures. The majority of known organic chemicals amongst REACH registered structures are neutral (56%, with 18% as non-polar and 38% as polar). This fraction of neutral substances is smaller when considering transformation products (51%, with 12% non-polar and 39% polar), whereas the fraction of all zwitterion/amphoteric substances increases (from 4% to 8%), the fraction of ionizable anions and anions increases (from 21% to 34%), while the fraction of ionizable cations and cations decreases (down from 18% to 7%). This is attributable to oxidative reactions, by either photolysis, aerobic biodegradation or hydrolysis, often adding polar or negatively charged oxygen moieties (e.g. alcohols, carboxylic acids, etc.) (Fenner et al., 2013). For the REACH registered substances in DW relevant media, less than half were neutral substances (49%), there was a larger fraction of (ionizable) anions (26%) than (ionizable) cations (21%), and 4% were zwitterionic/amphoteric. This increase in the fraction of ionic and ionizable substances is indicative of these substances being in general more mobile than neutral substances, and therefore, more likely to be detected in DW relevant media.

### 3.4 Distribution of PMT/vPvM conclusions

Table 3 contains 509 unique chemical structures (associated with 991 REACH registered substances) that have been detected in at least one of the six water media considered. The PMT/vPvM conclusions are based on 2019 criteria proposed by the UBA (Neumann and Schliebner, 2019).

73% of the detected REACH registered substance (372 of 509) should be further evaluated and scrutinized because: 110 were concluded to meet the PMT/vPvM criteria, 23 were considered persistent and mobile but with currently no high-quality consensus conclusions that the criteria for T is met, 136 were considered "Potential PMT/vPvM" based on screening data, and for 103 there was insufficient data to conclude a PMT/vPvM assessment. Only 26% of the detected REACH registered substance (137 of 509) were concluded to be not PMT/vPvM substances.

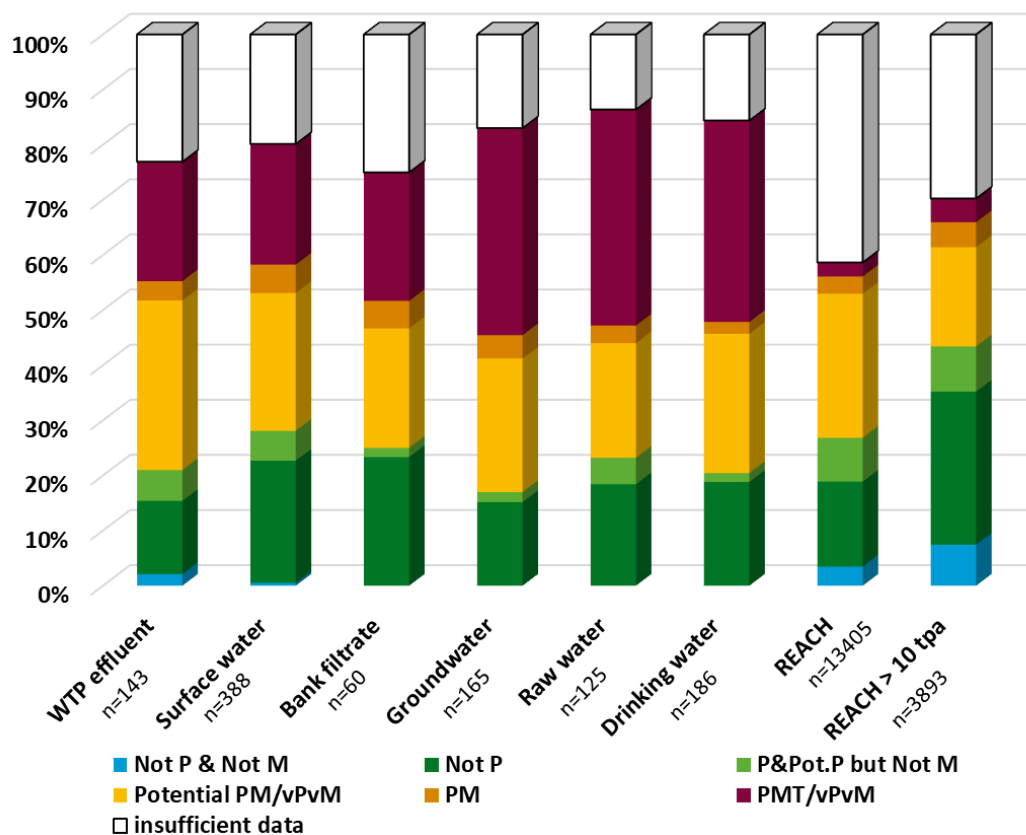
The percentage distribution of the PMT/vPvM conclusions for all considered water media can be found in Table 6 and Figure 3. The "Not PMT/vPvM" conclusion is subdivided into three categories used exclusively in this report: "Not P & Not M" (blue), "Not P" (dark green), and "P & potential P, but not M" (light green). The percentage distribution of the PMT/vPvM conclusions of the whole REACH registration database (as of September 2021) from Arp and Hale (2023) and of only those substances in the REACH registration database with registration volumes > 10 tpa is also presented.

**Table 6: Percentage distribution of the PMT/vPvM conclusions of REACH registered substances detected in the six water media compared to the number of unique chemical structures detected.**

Substance inventory	Unique Chemical Structures	PMT/vPvM Conclusion						
		Not P & Not M	Not P	P & pot. P, but Not M	Potential PMT/vPvM	PM	PMT/vPvM	insufficient data
WTPE	143	2%	13%	6%	31%	3%	<b>22%</b>	23%
SW	388	1%	22%	5%	25%	5%	<b>22%</b>	20%
BF	60	0%	23%	2%	22%	5%	<b>23%</b>	25%
GW	165	0%	15%	2%	24%	4%	<b>38%</b>	17%
RW	125	0%	18%	5%	21%	3%	<b>39%</b>	14%
DW	186	0%	19%	2%	25%	2%	<b>37%</b>	16%
All water media	509	0%	21%	5%	27%	5%	<b>22%</b>	20%
DW rel. media	311	0%	19%	3%	26%	4%	<b>30%</b>	18%
REACH	13405	3%	15%	8%	26%	3%	3%	41%
REACH >10tpa	3893	7%	28%	8%	18%	5%	4%	30%



**Figure 3. Distribution of the PMT/vPvM conclusions of REACH registered substances detected in the six water media considered compared to the whole REACH registration database and those with registration volumes > 10 tpa**



Source: Original Figure

There was insufficient data to conclude a PMT/vPvM assessment (white) for 41% of the 13405 unique chemical structures in the REACH registration database. Even for those with registration volumes > 10 tpa, where there should be more test data available due to REACH registration requirements, 30% of the 3893 substances had insufficient data to conclude a PMT/vPvM assessment (white). For the detected REACH registered substances, regardless of the registered volume, there appears to be less of a data gap. This may not be surprising, as detections in environmental monitoring can spur academic and regulatory interest to test the three intrinsic substance properties persistence, mobility and toxicity. Still for 20% of the 509 REACH registered unique chemical structures were detected in the environment, and even for 18% of the 311 REACH registered unique chemical structures detected in DW relevant media, there was insufficient data to conclude a PMT/vPvM assessment (white).

A key observation is that only 2.6 % (343 of 13406) of all REACH registered, unique chemical structures fulfil the PMT/vPvM criteria. For the six DW relevant media the portion of PMT/vPvM substances that fulfil the PMT/vPvM criteria increases significantly to 30% (92 of 311). In other words, a PMT/vPvM substance in the REACH registration database has an 11.5 times higher chance of being detected (chi-square test highly significant with X-squared = 378.22, Degrees of freedom = 1, p-value < 2.2e-16) than the other substances in the REACH registration database. Consequently, a PMT/vPvM substance in the REACH registration database has a significantly higher likelihood than a Not PMT/vPvM substance in the REACH registration database to be detected in DW relevant media. Just looking at GW, RW and DW the percentages

and consequently the likelihood are even higher, being 38%, 39% and 37%, respectively, of detected substances meeting the PMT/vPvM criteria. This trend is expected, as substances with the intrinsic properties of persistence and mobility are the ones with the greatest propensity to be detected in DW relevant media. (Arp and Hale, 2019).

The opposite is also observed as 27 % (3595 of 13406) of REACH registered substances that could be assessed do not fulfil the PMT/vPvM criteria. In DW relevant media only 23% (70 of 311) of REACH registered substances do not fulfil the PMT/vPvM criteria. Explanations for not PMT/vPvM substances being detected is due to either high emission rates, favourable exposure pathways, or degradation reactions being slower in the environment being monitored. The compiled results show that for BF only 22% of REACH registered substances met the PMT/vPvM criteria compared to the 37 to 39% of substances for GW, RW and DW. The distribution of PMT/vPvM conclusions for BF was more similar to SW and WTPE (22 % of substances met the criteria for SW and WTPE). This could be explained by the fact that BF is a "transition" media between SW and RW, as well as some of the sampling points could have been near the SW sources, meaning that there was insufficient time for biodegradation to have occurred. The "Not P" data in Figure 3 supports this, as there are more Not P substances detected in BF than in GW, RW and DW. This trend may also be influenced by samples size, as BF had the fewest detected substances (n=60, with and 25% of them having insufficient data), whereas the three other DW relevant media had between 125 to 388 substances detected in them.

For the middle category of "Potential PMT/vPvM" there was no clear difference in the distribution across the different media, nor amongst the full list of REACH registered substances, which ranged from 21% to 31% of substances in each list. The only group that was a slight outlier in this regard were the substances with REACH registration volumes > 10 tpa, which had the lowest percentage of "Potential PMT/vPvM" substances at 18%. This is again likely due to greater amount of information required when these substances are registered. The reason for most of the "Potential PMT/vPvM" substances being classified as such is because only screening-level data for P and/or M are available. Higher quality data or sufficient weight-of-evidence data are needed to make a less ambiguous PMT/vPvM conclusion (Arp and Hale, 2023). More persistency testing would lower the percentage of substances falling into this ambiguous category.

For the category "PM" substances, there was also no clear difference in the distribution of detected substances across the different media, nor amongst the full list of REACH registered substances, where all percentages ranged from 2% to 5%. This implies there are a substantial number of borderline substances detected that are persistent and mobile (fulfilling a combination of P and M, vP and M or P and vM), but are not considered to be PMT substances as there is currently no high-quality consensus conclusions that the criteria for T is met. Some of these persistent and mobile substances present at high concentrations in environmental samples could be prioritized for toxicity (or mixture toxicity) testing.

A misconception about the PMT/vPvM criteria is that it can be used without any emission data to predict if a substance will contaminate DW relevant media. A similar misconception would be that emission data alone can predict if a substance can contaminate DW relevant media. It is the combination of emission data with test data on persistency and mobility, along with a detailed exposure model, that can predict if a substance may appear in DW relevant media (Arp and Hale, 2022). However, even without exposure modelling a combination of the considerations of emission likelihood, persistence and mobility have been able to identify emerging drinking water contaminants for the first time in several studies (Kiefer et al., 2021; Neuwald et al., 2021; Schulze et al., 2019, 2018). The success of such studies is to be expected based on the results

here that PMT/vPvM substance in the REACH registration database has an 11.5 times higher chance of being detected than the other substances in the REACH registration database.

For persistent and mobile substances, lower emissions would be needed to pose a threat to the sources of the drinking water. Therefore, it is to be expected that most of the "Not PMT/vPvM" substances detected in the four DW relevant media are associated with high emissions, as was the case for conclusions of the previous PMT/vPvM assessments (Hale et al., 2022; Neumann and Schliebner, 2019). As examples in this study, there were 14 "Not P" substances detected in bank filtrate, all of which were mobile and associated with high emissions. To elaborate, 7 of these substances were registered under REACH with registration volumes > 1000 tpa (therefore, large emissions are likely). The others were likely high production substances as well, including bisphenol-a, triphenyl phosphate, 2-methyl-2H-isothiazol-3-one (a popular biocide), methyl cinnamate, toluene-4-sulphonamide (a plasticizer), 2-amino-3,5-xylenesulphonic acid and 4-dodecyl-benzenesulfonic acid. Similarly there were also 31 "Not P" substances registered under REACH and detected in drinking water, with 16 of with registration volumes > 1000 tpa and therefore likely associated with high emissions. The remainder of the substances were previously registered under REACH at higher production volumes than the 2019 registration volume (bisphenol a, benzyl butyl phthalate), or associated with high-volume pharmaceuticals as an additional source (nicotine, androstenedione, sodium salicylate, acetylsalicylic acid, theophylline), or are the plasticizer toluene-4-sulphonamide and two substances with low potential for adsorption but with unknown uses (dichloroacetic acid and 2-chloroethanol).

### 3.5 Empirical Validation of the PMT/vPvM Criteria

The compiled data set of substances detected in DW relevant media, and their subsequent PMT/vPvM assessments can be used to empirically validate the PMT/vPvM criteria. The PMT/vPvM criteria itself is based on the condition that threshold values for persistence and mobility are met. The P/vP criteria is based on REACH Annex XIII, and the mobility criteria is based on the minimum experimental log  $K_{OC}$  value between a pH of 4 to 9 (Neumann and Schliebner, 2019). Here, two PMT/vPvM criteria are considered. The first is the PMT/vPvM criteria proposed in 2019 by UBA (Neumann & Schliebner, 2019). The second is the less stringent criteria proposed in 2021 by the EC (European Commission, 2021). There is a discrepancy between the mobility criteria proposed by the UBA and by the EC. The M/vM criteria proposed by the UBA in 2019 are a minimum, experimentally measured log  $K_{OC}$  determined at a pH between 4-9 of < 4.0 as M and <3.0 as vM. The threshold values for log  $K_{OC}$  proposed by EC in 2021 are <3.0 as M and <2.0 as vM (European Commission, 2021).

Figure 4 presents a series of histograms of experimental, minimum log  $K_{OC}$  values (pH 4-9) for unique chemical structures registered under REACH that meet the P/vP criteria and were detected in A) WTPE (37 substances); B) SW (87 substances); C) BF (13 substances); D) GW (42 substances); E) RW (47 substances); and F) DW (46 substances). As is evident from this figure, more than 95% of the P/vP substances in five water media except SW fulfil the PMT/vPvM criteria proposed in 2019 by the UBA. Considering just the four DW relevant media (BF, GW, RW and DW), only around 85% of the P/vP substances fulfil the less stringent criteria proposed in 2021 by the EC. The P/vP substances in SW, by contrast, contain 16% of substances that do not meet the criteria proposed by the UBA in 2019, and 33% of substances that do not meet the less stringent criteria proposed by the EC in 2021. This is due to SW being contaminated by direct emissions, unlike the DW relevant media, that undergo some degree of natural filtration. The criteria proposed by the UBA in 2019 are, therefore, more protective and better captures the distribution of substances meeting the P/vP criteria detected in DW relevant media than the less stringent criteria proposed by the EC in 2021.

**Figure 4. Distribution of experimental log  $K_{OC}$  values for the unique chemical structures registered under REACH that meet the P/vP criteria in diverse water media**

Histograms of number of substances (y-axis) following into different intervals of experimental log  $K_{OC}$  values are presented for A) wastewater treatment plant effluent (WTPE, 37 substances); B) surface water (SW, 87 substances); C) bank filtrate (BF, 13 substances); D) groundwater (GW, 42 substances); E) raw water (RW, 47 substances); and F) drinking water (DW, 46 substances). The M and vM criteria are presented as proposed by UBA in 2019 (log  $K_{OC}$  <4.0 and <3.0), as well as proposed by EC in 2021 (log  $K_{OC}$  3.0 and 2.0) with colours (dark red = vM, red= M and green = Not M). The striped green/red pattern (M criterion) and the striped dark red/red pattern (vM criterion) indicate the shift from the proposal by UBA to the less stringent proposal by the EC.

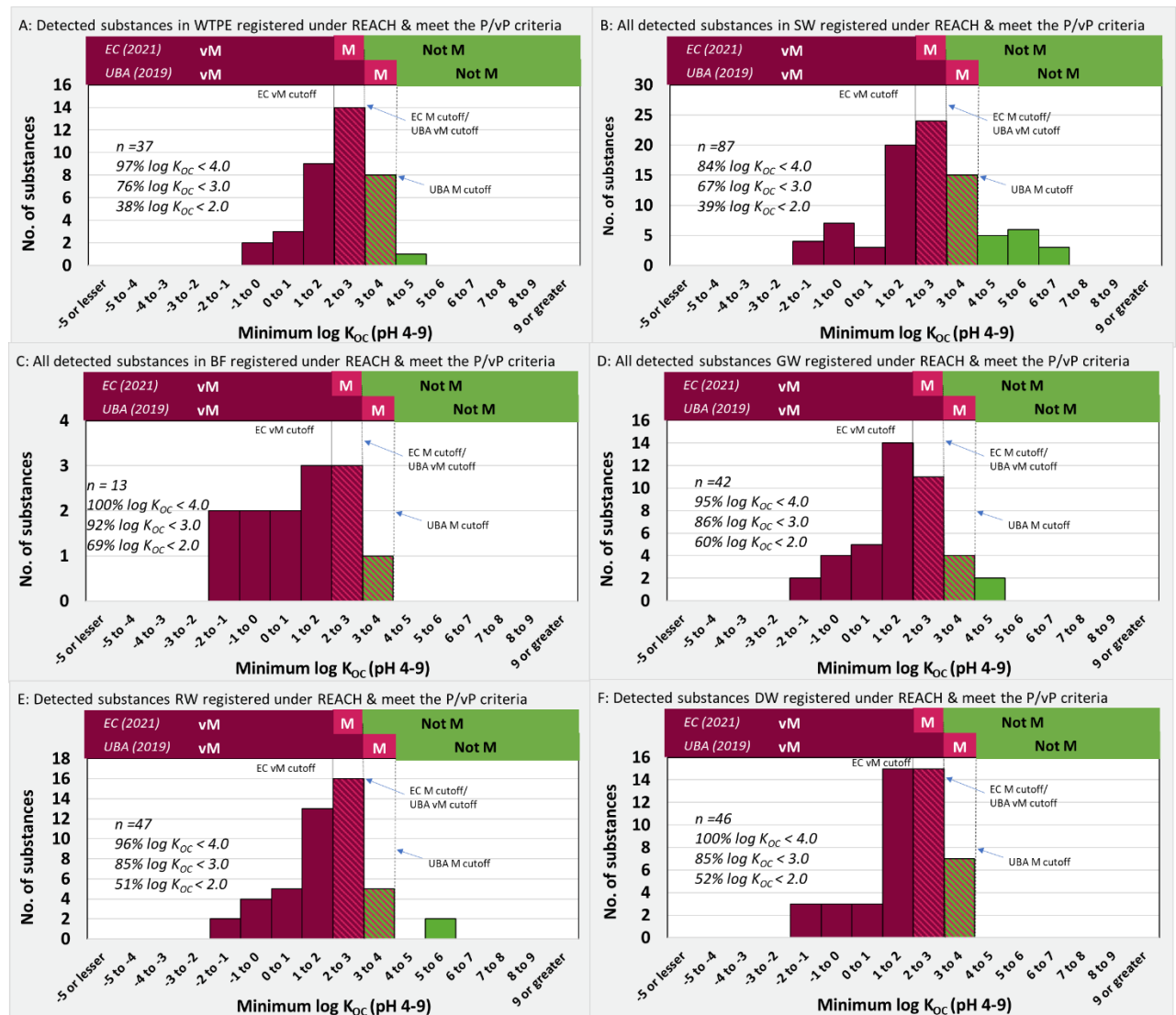


Figure 4 shows collectively that the PMT/vPvM criteria are fit-for-purpose for protecting the sources of our drinking water from the threat from persistent and toxic substances, as they accurately capture the P/vP substances that have been detected in DW relevant media, with a negligible number of false negatives (i.e. P/vP substances that do not meet the M/vM criteria). These false negatives are likely due to large emissions or very local emissions to the drinking water sample (Hale et al., 2022). This is as expected, as the PMT/vPvM criteria proposed by the UBA in 2019 were scientifically, technically and regulatorily justified in order to protect against bank filtration breakthrough of toxic substances in an earlier report (Arp and Hale, 2019).

## 4 Recommendations

Removing PMT/vPvM substances from the environment or during drinking water production is expensive and in most cases ineffective (Hale et al., 2022). Preventing emissions is generally the best solution. Consequently, registrants, researchers, regulatory authorities and the water production sector are encouraged to consider and act on this compiled list of PMT/vPvM substances in the REACH registration database that were detected in the environment. Further action should also be taken on detected substances where a definitive PMT/vPvM assessment was not possible. Specific recommendations for diverse sectors are presented below.

### 4.1 Manufacturers, importers and downstream users

There were 20% of REACH registered substances detected in the selected water media for which a PMT/vPvM assessment could not be carried out due to a lack of data. In addition, there was between 21-31% of substances detected in the environment where the conclusion was an ambiguous "Potential PMT/vPvM". These substances should be prioritized for further investigation to close the test data gaps for a PMT/vPvM assessment. In most cases, persistence information is missing, but these substances should also be prioritized for mobility and toxicity testing if this data is absent too. Recommendations for closing these data gaps can be found in Arp et al. (2023).

### 4.2 Local authorities and water suppliers

For substances meeting the PMT/vPvM criteria and detected in DW relevant media, their presence in DW relevant media can linger for long time scales, even after emission reductions have occurred (Hale et al., 2022, 2020). Therefore, a key recommendation from this study is to consider comprehensive risk management measures for the substances that are widespread in drinking water media and meet the PMT/vPvM criteria. Local authorities, water suppliers and producers of drinking water are encouraged to monitor for the detected PMT/vPvM substances registered under REACH presented here, particularly if they have been detected in several media or at high concentrations. Another group of substances to consider are the REACH registered substances that have been detected > 0.1 µg/L, but for which there is insufficient information to make a definitive PMT/vPvM assessment. Future studies may confirm that some of these meet the PMT/vPvM criteria.

When PMT/vPvM substances are spotted in a drinking water source, local authorities at the watershed scale could develop "source control" schemes. These are done by facilitating communication between the users and emitters of PMT/vPvM substances with the water suppliers that are monitoring or tasked with remediating them. Following such communication, active emission reduction programs, accompanied by monitoring programs, can be set up to ensure low exposure or risk of the PMT/vPvM substances. In this way, more economically feasible costs of pollution prevention can be carried out upstream, ideally covered by the user of the chemical, though with guidance and assistance from the water supplier. This is the preferred approach compared to dealing with non-economically feasible and less effective clean-up costs downstream, such as the drinking water production facility.

Substances that are "Not PMT/vPvM" substances also can contaminate drinking water media, due to direct contamination (allowing for Not M substances to contaminate), short travel

distances or lack of favourable conditions for biodegradation. The "Not PMT/vPvM" substances identified in this study that were shown to have contaminated drinking water media were mostly "Not P" substances that were emitted in large volumes, as shown previously (Hale et al., 2022, 2020). Concentrations of these substances in drinking water media would be easier to remove through emission reduction, source control, and if needed the implementation of removal technology.

### 4.3 European Commission, ECHA and Member States

The European Commission (EC) has taken the initiative to adopt the PMT/vPvM hazard categories in the CLP regulation (Regulation 1272/2008/EC on classification, labelling and packaging of substances and mixtures), as well as introducing such hazard classes in the REACH Regulation (Registration, Evaluation, Authorisation and Restriction of Chemicals, Reg. (EC) 1272/2008) (European Commission, 2021, 2020). The PMT/vPvM assessment (Arp and Hale, 2023; Neumann and Schliebner, 2019) was developed to identify the substances registered under REACH that pose the greatest propensity to contaminate drinking water media over long distances and long-time scales after the point of the release. There are three main findings in this report that re-emphasize that the PMT/vPvM criteria are fit-for-purpose in the REACH regulation.

The first is the relative frequency and concentrations in which REACH registered substances can be monitored in water media. Nearly 50% of the substances detected in DW relevant media were REACH registered (Table 4). Further, REACH registered substances were the most likely to be present at concentrations  $> 0.1 \mu\text{g/L}$  Figure 1. The second finding indicating that the PMT/vPvM criteria is fit for purpose is the frequency with which it can predict drinking water contamination in the absence of emission or exposure pathway data. Of the 343 unique chemical structures within the REACH registration database as of September 2021 that meet the PMT/vPvM criteria, nearly a third of them, or 110 substances, have been detected in at least one of the six water media considered. Looking at the unique chemical structures registered under REACH that were detected in GW, RW and DW, respectively, there were 38%, 39% and 37% of them respectively that met PMT/vPvM criteria proposed by the UBA in 2019. By contrast only 2.6% of the unique chemical structures in REACH registration database were concluded to be PMT/vPvM substances. The third finding is that the  $\log K_{oc}$  threshold value of  $<4.0$  for the M conclusion for P/vP substances captures between 95-100% of the P/vP substances detected in DW relevant media (BF, GW, RW and DW). The  $\log K_{oc}$  threshold values of  $<3.0$  is less protective, though can capture between 85-92% of the P/vP substances detected in DW relevant media (Figure 4).

Action on the PMT/vPvM substances on this list by regulators does not need to wait until future revisions to the REACH regulations. Already there have been three PMT/vPvM substances as substances of very high concern (SVHC) following Article 57 (f), to demonstrate "scientific evidence of probable serious effects to human health or the environment which give rise to an equivalent level of concern" (Hale et al., 2020). The PMT/vPvM substances detected in DW relevant media here should be considered more closely if regulatory action may be needed.

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