

**To users of chromium trioxide
in chemical conversion coatings
for European Space Programmes**

Noordwijk, 2023-07-27

Our ref. MPTB-ESA-MO-0126

Continued use of chromium trioxide in chemical conversion coatings for space hardware after the REACH authorisation sunset date on 21 September 2017

The purpose of this document, which has been prepared in the frame of the Chromates Space Task Force (STF) of the Materials and Processes Technology Board¹, is to facilitate compliance with the REACH authorisation requirement for the use of chromium trioxide (EC 215-607-8; CAS 1333-82-0) – hereafter “CrO₃” or “**the Substance**” – in the European space industry after the Annex XIV sunset date on 21 September 2017. More specifically, this document covers the use of CrO₃ in chromic (or chemical) conversion coating (CCC) and the repair or maintenance of such coating on aluminium alloy parts used in launchers and space vehicles – hereafter “**the Use**”. For these applications CrO₃ is contained in certain mixtures sold in or imported into the EU by Henkel AG & Co. KGaA (“**Henkel**”) or its EU affiliates.

Info box 1 CTACSub authorisation decision C(2020) 8797 final, its annulment and temporary maintenance of effects

With Commission Implementing Decision **C(2020) 8797 final of 18.12.2020²** - hereafter “**the Authorisation Decision**” (AD) – the European Commission has (partially) granted an authorisation for certain uses of CrO₃ under REACH to *Chemservice GmbH and others* as **Authorisation Holders³**; these are the members of the **Chromium Trioxide Authorisation Consortium - Submission Consortium** (CTACSub). CTACSub has issued a corresponding Questions & Answers document⁴. *Please note that with its judgment of 20 April 2023 in [Case C-144/21 \(link to judgment\)](#) the Court of Justice of the European Union (CJEU) has **annulled** most parts of this AD, but at the same time declared its **effects to be maintained** for a period not exceeding one year from the date of delivery of the judgment, i.e. **at the latest by 20 April 2024**. The annulment was justified in particular with significant / non-negligible uncertainties concerning the assessment of exposure and the absence of suitable alternatives due to the broad scope of the CTACSub Application for Authorisation (AfA). Please see [question 11](#) below for further information about the effects of this judgment.*

¹ The Materials and Processes Technology Board of the European Space Components Coordination (ESCC MPTB) is a partnership between the European Space Agency (ESA), national space agencies, and space industry represented by ASD-Eurospace; it is chaired at present by ESA.

² Decision summary in the Official Journal of the European Union C447/5 of 23.12.2020 ([link](#)); the full decision is available at <https://ec.europa.eu/docsroom/documents/44374>, the Annex to it at <https://ec.europa.eu/docsroom/documents/44375>.

³ The addressees of the decision are: Chemservice GmbH (transferred from Lanxess Deutschland GmbH); Atotech Deutschland GmbH; Boeing Distribution Inc.; Prospere Chemical Logistic OÜ (transferred from Bondex Trading Ltd); CROMITAL S.P.A.; Elementis Chromium LLP (UK); MacDermid Enthone GmbH.

⁴ Current version of 24.1.2023 ([link](#)). Please check on www.jonesdayreach.com for any subsequent update.

The following questions and answers contain further clarification of legal requirements and recommended good practice in the context of the CTACSub Authorisation Decision, including after the CJEU judgment of 20 April 2023 in Case C-144/21.

1. What does the Authorisation Decision mean for the Use, given that the sunset date for CrO₃ has passed on 21.9.2017?

Until further notice, and at the latest until 20 April 2024, the Authorisation Decision of 18.12.2020 continues to provide the **legal boundaries for continued use after the sunset date** to DUs relying on it.⁵ To this end the DU has to demonstrate the following in order to be covered by the Authorisation Decision:

- i. The DU is in the same supply chain as the Authorisation Holder(s);
- ii. The Use is covered by the authorised use descriptions, including the key functionalities;
- iii. The DU complies with the operational conditions (OC) and risk management measures (RMM) in the Chemical Safety Report (CSR) of the corresponding Application for Authorisation (AfA); these should have been included in updated Exposure Scenarios (Annex to Safety Data Sheet/SDS) made available by the supplier to the DU;
- iv. The DU complies with the conditions in Article 2 and 3 (as regards spraying operations) of the Authorisation Decision, incl. at least annual workplace and environmental measurements⁶;
- v. The DU complies with the notification requirement to ECHA pursuant to REACH Article 66 for the authorised use (see below question 7 and Appendix 1 in this document).

In case of non-compliance, the DU is not covered by the authorisation.

Presently, authorisation has been granted – among others for the following use with specified key functionalities covering **surface treatment** for applications in the **aeronautics and aerospace industries** – according to Article 1(1) of the CTACSub Authorisation Decision (also known as “Use 4”):

Info box 2 Scope of authorized use covering surface treatment for applications in the aeronautics and aerospace industries

“Surface treatment for applications in the aeronautics and aerospace industries, unrelated to functional chrome plating or functional chrome plating with decorative character, where any of the following **key functionalities** is necessary for the intended use: corrosion resistance / active corrosion inhibition, chemical resistance, hardness, adhesion promotion (adhesion to subsequent coating or paint), temperature resistance, resistance to embrittlement, wear resistance, surface properties impeding deposition of organisms, layer thickness, flexibility, and resistivity”

⁵ See also the CTACSub Press Release of 20 April 2023, available [here](#).

⁶ CTACSub has warned that the DUs’ existing worker and environmental monitoring programmes may not be sufficient to meet the specific authorisation requirements.

Henkel has confirmed that the following products (mixtures) containing CrO₃ and of special interest to the space industry are covered – among others – by the authorisation number **REACH/20/18/17** (belonging to the Authorisation Holder Prospere Chemical Logistic OÜ)⁷:

- **BONDERITE M-CR 1200 AERO, BONDERITE M-CR 1200S AERO, BONDERITE M-CR 600 AERO**

Therefore, DUs purchasing the mentioned Henkel products for the Use and ‘key functionalities’ as described in Info box 2 above are generally in scope of the authorisation number REACH/20/18/17 and can demonstrate the fulfilment of conditions i. and ii. above. However, please see also the Info box 3 below regarding imminent changes.

Info box 3 Important update regarding the authorisation number (2.6.2023)

Henkel informed that qualification of a new CrO₃ supplier is currently running. DUs are strongly advised to check their REACH SDS and labels to be received for any corresponding **change of the REACH authorisation number away from REACH/20/18/17** (for *Prospere Chemical Logistic OÜ*) and in this case update their REACH Article 66 notifications accordingly. The other CTACSub authorisation numbers for surface treatment for applications in the aeronautics and aerospace industries (“Use 4”) are as follows: REACH/20/18/14 (*Chemservice GmbH*); REACH/20/18/15 (*Atotech Deutschland GmbH*); REACH/20/18/16 (*Boeing Distribution Inc.*); REACH/20/18/18 (*CROMITAL S.P.A.*); REACH/20/18/19 (*Elementis Chromium LLP*); REACH/20/18/20 (*MacDermid Enthone GmbH*).

2. Who is legally required to ensure compliance with the authorisation requirement?

The compliance duty is with the DU, i.e. each EU legal entity using the Substance (here: present in the mixture). It is important to note that the authorisation requirement does not concern the supply and use of already surface-treated hardware (see below question 10).

3. By when do DUs have to comply with the Authorisation Decision?

The table below provides an overview of key required actions for DUs and corresponding due dates⁸.

Table 1 DU actions to be covered by the CTACSub authorisation granted during its validity

DU action to be covered by the CTACSub authorisation granted	Due date
Compliance with updated SDS with specific Exposure Scenarios (implement all relevant OC and RMM)	Without undue delay following provision of SDS (due by 18.3.2021)
Initial REACH Article 66 notification by DU (authorised use, key functionalities) – See also <u>question 7</u> below and <u>Appendix 1</u>	23.3.2021 (CTACSub recommendation)
Finish <u>first</u> workplace exposure measurements*	18.06.2021
(First) <u>updated</u> REACH Article 66 notification to include the information from the first monitoring programmes for workplace	18.12.2021

⁷ See letter titled “Henkel products for the Aerospace Industry – Update information on REACH Authorisation”, January 2021 and its Table 1) “Products covered by supplier authorization containing Chromium Trioxide CAS 1333-82-0”; enclosed as Appendix 3 in this document. Please note that Henkel plans to issue updated customer letters after the CJEU judgment of 20 April 2023; these are not yet available at the time of finalising this document.

⁸ See also question 4 in the CTACSub Q&A of 24 January 2023 ([link](#)). Please check on www.jonesdayreach.com for any subsequent update.

exposure, air and wastewater emission measurements – <i>for transmission to the authorisation holders*</i>	
Finish <u>second</u> occupational exposure measurements campaign and conduct annual air and water emissions monitoring	18.06.2022
Finish <u>third</u> occupational exposure measurements campaign and conduct annual air and water emissions monitoring	18.06.2023
(Second etc.) updated REACH Article 66 notification by DU based on at least annual measurements (!)	2022, 2023, ...

*Please use the format issued by ECHA for reporting monitoring data for DUs of the CTACSub Authorisation Decision; it is available [here](#) (if the link does not open, please look for it on the [ECHA Article 66 notification page](#)).

4. What kind of documentation should a DU keep in place to show authorisation compliance?

The following documents are recommended as a minimum, as part of an internal documentation system:

- **The present document**, especially with reference to question 1 above, and the Henkel communications in the Appendices within this document;
- **Latest version of the (extended) REACH safety data sheet for the mixture**; Henkel has made available Exposure Scenarios (Annex to Safety Data Sheet) on its website <https://mysds.henkel.com/index.html> as soon as they are received from its suppliers⁹;
- **Evidence of the strict application of the CTACSub Good Practice Sheets “GPS”** (see below under 5. and 6.), such as the list of GPSs used by the DU and evidence of the conduct of exposure and environmental monitoring as set out in the respective GPS.
- **Submission reports for REACH Article 66 notifications and any subsequent updates** (see below question 7 & Appendix 1).

5. What are the implications of the Good Practice Sheets (GPS) published by CTACSub?

CTACSub has published a number of Good Practice Sheets, providing safe handling advice for DUs wishing to rely on the Authorisation Decision.¹⁰ Compliance with these GPSs is voluntary and thus not legally binding (only once incorporated in REACH SDSs), but DUs are strongly recommended to follow them as a good practice and document their application (see above under 4.), also in anticipation of any enforcement and future re-application for authorisation, if required.

According to the GPS Overview Table¹¹ the GPSs A, C, D & E apply to the use group subject to this document. In particular, C1 specifies conversion coating. C5, which is touch-up using the pen, and C8, which is touch up with a brush, seem to be the most relevant for maintenance/repair.¹²

⁹ See Henkel, “REACH Authorisation Chromium Trioxide and Miscellaneous Chromates/Cr(VI) compounds”, January 2021 as Appendix 2 in this document. If a product is not displayed on the Henkel website, the customers nevertheless get SDS and Annex via an automated mail (e-mail or paper depending on the contact details).

¹⁰ They are available for download in English and partly other languages at <https://jonesdayreach.com/substances> under “III. Good Practice Sheets for Uses of Chromium Trioxide and Miscellaneous Chromates”.

¹¹ https://8bm.f33.myftpupload.com/wp-content/uploads/GPS-Overview-EN-2020-05-25_1.pdf.

¹² Note: Repair procedures may use products containing K/Na dichromates that are not subject of this document and the CTACSub AfA referred herein. Authorisation compliance needs to be assessed separately for each substance, use (on its own or as part of mixtures) and supply chain.

6. How can I prepare for possible enforcement on authorisation concerning the Substance?

To be ready for any possible enforcement, DUs are advised to put in place compliance documentation as per the answer to [question 4](#) above and strictly apply the relevant GPSs published by CTACSub as a good practice.

Info box 4 “Self-assessment” recommended by CTACSub for DUs

Note: The CTACSub Consortium¹³ recommends that DUs undertake a “self-assessment” in order to ensure compliance with the CTACSub authorisation decision and AfA, as well as national legislation on health & safety at the workplace.

For the present Use the legal compliance steps and recommended documentation to show REACH authorisation compliance have been elaborated in this document. Further actions to demonstrate coverage by the Authorisation Decision are at the DU’s discretion.

On 8 March 2023 ECHA published the results of a dedicated joint enforcement project “REACH-EN-FORCE-9”.¹⁴ The project was carried out in 2021 in 28 EU/EEA Member States. It had a focus on REACH authorisation duties, DUs and chromium trioxide. The project found a non-compliance rate of 26% with authorisation decisions. The **ECHA** report **recommends DUs**:

- to ensure that they **use a substance** subject to authorisation **in accordance with** the conditions of use and particularly in accordance with the operational conditions and risk management measures set out in the **authorisation decision** for their specific use.
- If it is unclear from the extended SDS which operational conditions or risk management measures are required for their specific use, then they should **seek clarification from their supplier**.
- DUs have to ensure that the **REACH Article 66 notification** is **kept up-to-date** including an update if they cease to use the authorised substance.

7. What are the next steps with regard to the REACH Article 66 notification duty for the DU?

DUs relying on the CTACSub Authorisation Decision are required to notify ECHA of their authorised use including key functionalities “*within three months of the first supply of the substance*” (REACH Article 66(1)). CTACSub recommends that the initial notification was completed **by 23.3.2021**¹⁵. Furthermore, (first) updates of this initial notification to include the information from the first monitoring programmes for workplace exposure, air and wastewater emission measurements using the ECHA format issued to this end were already required by 18.12.2021 (see above under 3.).

A dedicated list of additional questions and answers on REACH Article 66 DU notifications with special regard to CTACSub/CrO₃ is included in this document as [Appendix 1](#).

¹³ See CTACSub Q&A of 24 January 2023 ([link](#)), question 11. Please check on www.jonesdayreach.com for any subsequent update.

¹⁴ https://echa.europa.eu/documents/10162/17088/project_report_ref-9_en.pdf.

¹⁵ i.e. 3 months after publication of the Authorisation Decision.

Importantly with regard to **Henkel** products, please view above answer to question 1 regarding the **authorisation number** to be selected when making a notification or notification update for the authorised use of their products.

8. How to proceed with the exposure measurements “emission to air” for touch-up repairs, which typically require only very small quantities?

According to space industry experts, only a theoretical exposure via salt dust would be possible in these cases. As normally not more than a couple of grams of the salt are being used to prepare the chromium acid solution, the exposure is negligible. In addition, it will be nearly impossible to measure, as the critical activity (spoon into the salt and back to the weighing-vessel) last for not more than a very few seconds; hence a representative measurement on the exhaust stack is from a measurement-science point of view not reasonable. The GPSs published by CTACSub do not seem to address this particular topic.

It is recommended to include the expert reasoning for why the measurements are not technically possible – as detailed as possible – in the “Other info / Remarks” field in the ECHA reporting template for REACH Article 66 notifications (see above under 3. and 7.). Furthermore, downstream users should also look out for the validated exposure scenarios (they were due by 18 June 2022), as they may address this topic.

9. What do DUs located in Great Britain (GB) have to do, if they wish to continue the use formerly covered by the EU Authorisation Decision?

The EU REACH Regulation has ceased to apply in Great Britain ‘GB’ (comprising England, Scotland and Wales¹⁶) at the end of 2021. Instead, a separate but mostly similar UK REACH regime now applies to entities located in GB. GB-based DUs wishing to continue the use based on an upstream EU authorisation granted before the end of 2021 (such as CTACSub) had to **provide the UK Health & Safety Executive (HSE) by 1 March 2021** with information on their identity, the existing EU authorisation number, any conditions set out in the existing EU REACH authorisation, as well as on the identity of their EU supplier¹⁷. This notification allows the existing user to continue to use the authorised substance in accordance with the existing authorisation until it expires, unless informed otherwise.¹⁸ If you think you should have notified your existing GB-DU status, but haven't, please contact ukreach.authorisation@hse.gov.uk.

Info box 5 References for further information on UK REACH authorisation compliance

For information about the right to continue your use for space applications in GB **following on the original CTACSub EU authorisation after 21.9.2024** you are advised to contact your supplier and/or the ADCR Consortium: <https://www.adcr-consortium.eu>. You may also contact the HSE at ukreach.clp@hse.gov.uk.

¹⁶ Please note that EU REACH still continues to apply in Northern Ireland.

¹⁷ Further information / references are available under question 2 of the [CTACSub Q&A of 24 January 2023](#) and the Henkel letter “REACH Authorisation Chromium Trioxide and Miscellaneous Chromates/Cr(VI) compounds” of January 2021 included in [Appendix 2](#) in this document.

¹⁸ <https://www.hse.gov.uk/reach/grandfathering-authorisation.htm>.

10. What are the obligations for already surface-treated hardware related to REACH? REACH Article 33 & WFD Article 9(1)(i)/SCIP

The authorisation requirement does not apply (see above [question 2](#)). However, according to REACH Article 33(1) EU suppliers of articles¹⁹ containing a substance included in the REACH Candidate List (e.g. chromium trioxide or chromic acid)²⁰ above 0.1 % w/w in relation to the coated object (component article²¹ or complex object, as the case may be) shall provide EU customers with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the name of that substance. Further guidance on Article 33 compliance has already been provided by ECHA²² and ASD²³.

In addition, as from 5 January 2021 EU suppliers of articles should also provide (notify) the information pursuant to REACH Article 33(1) to ECHA, for its new database on Substance of Concern In products, as such or in complex objects (Products) – “SCIP”; the SCIP Database is now published on the ECHA website.²⁴ This “SCIP notification” requirement stems from Article 9(1)(i) of the revised Waste Framework Directive (WFD) 2008/98/EC and required transposition into the national laws of the EU Member States by 5 July 2020. A dedicated Space Task Force has elaborated SCIP compliance guidelines for space products²⁵.

Info box 6 REACH Article 33 declaration template for entities in the European Space Sector

Please note that a generic REACH Article 33 declaration template for entities in the European Space Sector has been elaborated in the frame of the ESCC MPTB. For the latest version of this template please contact reach.officer@esa.int.

11. I am a DU using CrO₃. What do I have to do if I want to continue using CrO₃ in the EU/EEA after expiry of the CTACSub Authorisation Decision?

According to the CJEU Judgment of 20 April 2023 in Case C-144/21 the CTACSub Authorisation Decision of the European Commission of 18 December 2020 (i.e. all its relevant provisions for the purpose of this document) will cease to have any effects after 20 April 2024 at the latest.

In response to this CTACSub Authorisation time limit imposed by the Court, Space DUs currently still relying on the CTACSub Authorisation are advised to do the following, **cumulatively**:

- i. Continue beyond 20 April 2024 to **comply with** the operational conditions (OC) and risk management measures (RMM) and monitoring programmes (at least annual measurements) as stated in the **extended Safety Data Sheet/SDS** made available by your supplier;

¹⁹ Space hardware typically qualifies as assemblies of articles (“complex objects”).

²⁰ <https://echa.europa.eu/candidate-list-table>.

²¹ According to the judgement of the European Court of Justice of 10 September 2015 in case C-106/14 the 0.1 % w/w threshold for complex products for the application of REACH Article 33 should be calculated with reference to each component article contained in a complex product (assembly) as supplied to the EU customer (“once an article, always an article” principle).

²² [ECHA Guidance on requirements for substances in articles, Version 4.0 - June 2017](#).

²³ [ASD Sectoral Guidance for Substances in Articles under REACH, Version 1 – November 2017](#).

²⁴ <https://echa.europa.eu/scip-database>.

²⁵ The latest version of 19 September 2022 (2nd update) is available on the Eurospace website ([link](#)). Please check the Eurospace website for any subsequent update of these guidelines.

- ii. Obtain your **supplier's written assurance** that and based on which upstream title and conditions your use of the mixture can continue post expiry of the CTACSub Authorisation Decision. Please note that *Henkel* already plans to issue updated customer letters after the CJEU judgment of 20 April 2023; these are not yet available at the time of finalising this document.
- iii. Closely follow the **re-assessment by the European Commission** of the CTACSub Authorisation Decision of 18 December 2020;
- iv. If possible, **ensure coverage by a new Commission authorisation decision** once the CTACSub Authorisation ceases to have effects (see question 12. below).

Info box 7 Transitional protection of a DU relying on CTACSub AfA after assumed expiry of the Authorisation Decision

According to this recommendation, the use by a DU in the same supply chain as a CTACSub applicant for authorisation / authorisation holder (see above footnote 3) based on the CTACSub Application for Authorisation (AfA) may also legally continue **after 20 April 2024**, as long as the European Commission has not taken a replacement decision for the annulled CTACSub Authorisation Decision of 18 December 2020. This right to continue use is based on the **transitional arrangement in the REACH Regulation and its Articles 56(1)(d) and 58(1)(c)(ii)**, because the CTACSub AfA was received by ECHA before the Latest Application Date for CrO₃ of 21 March 2016 and the Commission decision on the application is still pending (after the annulment and expiry of its effects). *Also during such period, REACH Article 66 notifications/updates to ECHA would no longer be applicable given the absence of a valid authorisation number; REACHLaw has asked ECHA for clarification on this issue (ECHA ref. #915106#); ECHA replied on 9 June 2023 that Commission and ECHA are currently reviewing the judgment and its impact on the original CTAC application and a response can only be given afterwards.*

DUs who cannot ensure coverage by an upstream authorisation / application for their continued use of CrO₃ according to the points above, are advised to take urgent action to prepare and submit an individual Downstream User AfA to this end.

12. What upstream review reports / applications for authorisation to grant a future title for the continued use of CrO₃ in the EU/EEA for chemical conversion coating to potentially cover downstream users in the European Space Sector are currently on-going?

The most relevant activity is the **Aerospace and Defence Chromates Reauthorisation Consortium (ADCR)**. For chemical conversion coating using chromium trioxide (and three other chromates) in the aerospace and defence industry and its supply chains EU authorisation review reports to CTAC have been submitted to ECHA by *Chemservice*, *Boeing* and *CROMITAL*. In addition, a new EU Application for Authorisation for this use has been submitted by *Henkel Global Supply Chain B.V.* If and once the authorisation is granted/extended based on these submissions, it can potentially also cover space downstream users not members of ADCR. For information about the then applicable authorisation number (depending on the future authorisation holder) DUs should view the supplier's SDS, label and any customer communications issued. Further information and news from ADCR are available at <https://www.adcr-consortium.eu>.

In addition, the **CTACSub2 Consortium**, a sub-group consisting of five member companies of the CTACSub Consortium, have filed review reports for 12 uses of CrO₃ (only). Unlike in case of ADCR, only DUs who formally signed up to CTACSub2 are covered. They will be listed by their name in the public version of the Review Report (*release by ECHA pending at the time of finalising this document*). Uses applied for are

different surface treatment technologies in the aeronautics and aerospace industries, including chemical conversion coating (**Use 8**). *Henkel* has informed that they have also signed up to CTACSub2 and the aerospace uses covered by the review reports will be valid for *Henkel* too, but for *Henkel's* Aerospace branded products they will not use the supply chain of CTACSub2, they will use a supply chain having submitted review reports under ADCR (see above). Also, no information is currently available as to whether Space DUs have signed up to CTACSub2. Given these constraints, the relevance of CTACSub2 for the Space Sector appears limited, requiring the DUs formal participation in CTACSub2 (the consortium is closed now). More details can be found in the CTACSub2 press release of 21.2.2023, available [here](#).

13. Where can I turn for further information concerning this issue?

The CTACSub Consortium Questions & Answers of 24 January 2023 ([link](#)) provide detailed information and advice for downstream users wishing to rely on the CTACSub Authorisation Decision until the expiry of its effects. Please check on www.jonesdayreach.com for any subsequent update.

In addition, CTACSub has provided a distinct overview on required DU actions to be covered by the CTACSub Authorisation of CrO₃ at a **webinar on 15.1.2021**. The webinar slides (in English, French, German, Italian and Spanish) as well as webinar Q&A are available [here](#), the Youtube recording [here](#).

For ADCR submissions, please see <https://www.adcr-consortium.eu>.

Contact your CrO₃ supplier, [national REACH helpdesk](#) or [ECHA](#).

For remaining questions you may contact Tim BECKER (Senior Legal Advisor, REACHLaw, tim.becker@reachlaw.fi, mobile: +358 40 773 8143) or Premysl JANIK (ESA, premysl.janik@esa.int).

For the Materials and Processes Technology Board

P. Janik (ESA), Chairman of the MPTB

Disclaimer

The information in this letter reflects the opinion of members of the Materials and Process Technology Board (MPTB) / Space Chromates Task Force (STF) from space industry, national space agencies, and ESA. It is not considered a requirement and any action to the described issue is subject to project or programme decision, nor a comprehensive treatment of the subject matter. The information is intended for guidance only and whilst it is provided in utmost good faith and has been based on the best information currently available and adequate technical standards, is to be relied upon at the user's own risk. No representations or warranties are made with regards to its completeness, or accuracy and no liability will be accepted by the MPTB / STF nor any organisation participating in the MPTB / STF for damages of any nature whatsoever resulting from the use of or reliance on the information.

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- Issue 5 ref. MPTB-ESA-MO-0126 of 2023-07-27 (*current, especially taking into account: The judgment of the CJEU of 20 April 2023 in case C-144/21, limiting the effects of the CTACSub Authorisation Decision until 20 April 2024 at the latest; the submissions made by ADCR and CTACSub2 applicants to ECHA;*

updates provided by Henkel; the ECHA REF-9 project report on enforcement of compliance with REACH authorisation obligations adopted on 13 February 2023; the CTACSub Q&A last update on 24 January 2023)

Appendices:

Appendix 1 – Questions and answers on REACH Article 66 downstream user notifications (this PDF page 11 et seqq.)

Appendix 2 – Henkel “REACH Authorisation Chromium Trioxide and Miscellaneous Chromates/Cr(VI) compounds”, January 2021 (this PDF page 16 et seqq.)

Appendix 3 - “Henkel products for the Aerospace Industry – Update information on REACH Authorisation”, January 2021 (this PDF page 38 et seqq.)

Appendix 1: Questions and answers on REACH Article 66 downstream user notifications

REACH Article 66 imposes a notification requirement to the European Chemicals Agency (ECHA) for a downstream user (DU) of a substance included on the REACH authorisation list (Annex XIV), which they use in accordance with an authorisation granted to their upstream supplier for that use (authorised use). These notifications are an important compliance requirement for DUs of substances covered by an upstream application for authorisation (upstream AfA), such as for chromium trioxide and other chromates. Many SMEs need to deal with ECHA for the first time.

The following Q&As aim to address key questions for DUs to support your REACH Article 66 and authorisation compliance at large.

1. Who needs to notify under REACH Article 66?

If you are a **downstream user** who continues to **use** an Annex XIV substance – as such or in a mixture – after its ‘sunset date’, based on an authorisation granted up your supply chain, you are required to notify your authorised use(s). The obligation applies to each **EU/EEA** legal entity using the substance (including e.g. surface treatment subcontractors, subsidiaries of a group of companies).

On the other hand, the following companies do **not** need to notify:

- DUs that have obtained their own authorisation for their own use(s);
- Distributors that only store and sell the substance;
- Suppliers of articles containing an Annex XIV substance as an integral part. Hence, suppliers and users of already surface-treated hardware do not need to notify. However, the use of an Annex XIV substance for article production (e.g. surface treatment) typically is a use subject to authorisation and Article 66 notification;
- DUs that are covered by an exemption from authorisation for their use (e.g. use for Scientific Research and Development as defined in REACH Art. 3(23)).

2. When is the notification due?

The submission of an Article 66 notification can only be done once the corresponding upstream AfA has been granted by the European Commission and the REACH **authorisation number** is available.

Once the authorisation is granted, you shall notify ECHA “**within three months** of the first supply of the substance”.²⁶ As the legal text is not very clear in this regard, the DU is practically advised to notify ECHA within 3 months after the authorisation decision has been officially published.

²⁶ Wording of the legal text, see REACH Art. 66(1).

3. What information needs to be notified, and how do I obtain it?

The following table provides an overview of the information that must or may be included in an Article 66 notification, and how you can typically obtain it:

Data	Requirement	Source to obtain
Company name, site address(es), contact details	Mandatory	Internal
Authorisation number (identifies the substance, authorised use and authorisation holder)	Mandatory ²⁷	Supplier / his SDS; Label of substance / mixture (REACH Art. 65); Authorisation decision
A brief explanation of key functionalities required for the DU's use and the related justification	Mandatory as per Authorisation Decision. Info must be entered under section "Further description of your use"	Authorisation decision For CTACSub/CrO ₃ see Annex 2 to the CTACSub Q&A of 24.1.2023 . Supplier may assist
Typical annual volume	Voluntary	Internal
Number of staff using the substance	Voluntary	Internal
Brief additional description about your use (e.g. the type of products or their sector of use)	Voluntary	Internal
Any involvement in potential substitution activities	Voluntary	Internal
Specific data required in the authorisation decision, e.g. annual workers exposure and environmental (air emissions and wastewater) monitoring	Mandatory: You will have to <i>attach</i> a file to your notification / update as an Annex, by the deadline set in the decision. The data 'as is' will automatically be forwarded by ECHA to the authorisation holder.	Internal; Additional measurements <i>Use monitoring templates issued by ECHA, e.g. for DUs of the CTACSub Authorisation Decision available here.</i>

4. How do I submit a notification?

You must have an active **REACH-IT** account to be able to submit your notification.

- Sign up in REACH-IT at <https://reach-it.echa.europa.eu/reach>
- Log into REACH-IT and from the Menu select 'Downstream user notification of authorised uses'
- Start filing via 'Prepare and submit online in REACH-IT'

You may also check ECHA's [Video tutorial on how to submit a downstream user notification](#).

²⁷ The Article 66 notification template provides a drop-down list of all authorisation numbers from which you must choose.

5. Can a notification be updated?

Yes, at any time. Even more, you should keep the information in your notification up to date, including any confidentiality claims and the justification for these. The notification status may be set as active or inactive (substituted/ceased use); the stated reason of inactivation will always be made public.

If the authorisation decision foresees the submission of exposure **monitoring data** to ECHA within certain deadlines, it may be advised to make the initial Article 66 notification without these data in order to comply with the 3-month deadline, and update the notification later on, using the applicable monitoring templates provided to this end). **This tiered notification approach was for example recommended for the CTACSub Authorisation decision.**

6. What are the costs for a notification?

There is no ECHA fee. However, if you wish to contract an external service provider to help you prepare and submit a notification, a service charge to be agreed with the service provider will apply. Also you should consider internal costs to prepare notifications, e.g. for human resources and carrying out any required measurements.

7. What happens if a DU does not submit the notification?

In this case national enforcement authorities may take action against the DU. This may range from the imposition of fines to a ban on the use of the substance until the notification is made. The enforcement approach and type of sanctions are Member State specific. However, it is important to note that an EU-wide enforcement project has been agreed by ECHA's Enforcement Forum, which will focus on REACH authorisation ("REF-9"); it started in 2021²⁸.

8. How will ECHA use the notified information?

ECHA maintains a register of Article 66 notifications and forwards them to the **relevant authorities in EU Member States**. Furthermore, ECHA shares non-confidential information from the notifications with the **public** on its website at <https://echa.europa.eu/du-66-notifications>²⁹ and specific anonymized information (namely monitoring data) with the (upstream) **authorisation holders (AH)**.

The following Figure 1³⁰ provides an overview of the different disclosure levels for notification data. As shown in the figure, the DU notifier may **flag certain data as confidential**, in order for them not to be published. This requires a valid justification and applies to company name, location of the site, name of the notified use, and – if notified - brief additional description of use and information on substitution activities.

²⁸ <https://echa.europa.eu/-/inspectors-in-the-eu-to-target-reach-authorisation-duties>.

²⁹ ECHA publishes / updates the information.

³⁰ Source: ECHA, [Downstream user notifications of authorised uses: Information made public by ECHA \(July 2018\)](#).

	Information published (Y / N / claims-dependent)	Information shared with AH (Y / N)
Company info	Company name	Company name
	Country of site	Country of site
	Address of site	Address of site
	Contact	Contact
Substance info	Substance name	
Use info	Use name	
	[Quantity - precise value/range] [- band]	[Quantity - precise value/range] [- band]
	[Number of staff - precise value/range] [- aggregate]	[Number of staff]
	[Brief additional description of use]	[Brief additional description of use]
	[Involvement in substitution activities]	[Involvement in substitution activities]
	Data attached as required by decision	Data attached as required by decision
Supplier	Authorisation holder (upstream supplier)	
Status	Current status (active/inactive) and inactivation reason	Current status (active/inactive)

Figure 1: Notification information made available by ECHA (left column: information published; right column: information shared with the authorisation holder)

Note: Fields in square brackets are optional and therefore are not be present for all notifications. Similarly, requirements for submission of specific data on exposure or alternatives (uploaded as attachments) do not apply for all authorisation decisions.

ECHA's Scientific Committees will also use the information gathered from the DU notifications during the evaluation of review reports of the AH.³¹

9. As a DU of an Annex XIV substance, do I have any other duties under REACH after adoption of the upstream authorisation, apart from Article 66 notification?

Yes! Importantly, you need to ensure that your continued use of the substance is in accordance with:

- the applied-for and authorised use part of the upstream AfA;
- the conditions of the authorisation granted to the upstream supplier for this use; for example, the authorisation decision may set out certain exposure monitoring and reporting requirements with deadlines for DUs; - Note that the authorisation holder or ECHA may provide monitoring templates to this end;
- the supplier's 'extended' SDS, as updated after the authorisation, including use conditions and risk management measures in the exposure scenarios;
- any further 'safe use' recommendations by the upstream applicants, e.g. the Good Practice Sheets ('GPS') issued by the CTACSub Consortium.

Given the complexity of ensuring compliance as a DU with upstream authorisations, you are advised to elaborate an **action plan with timelines / deadlines** for your affected substances and uses. For the action plan, you are also advised to take into account other relevant requirements than REACH, such as the legislation on health & safety at the workplace.

³¹ See ECHA Q&A 1366 dd. 21/08/2017, available at <https://echa.europa.eu/support/qas-support/qas>.

10. Where can I find further information for help in my specific case?

- ECHA website: <https://echa.europa.eu/support/dossier-submission-tools/reach-it/downstream-user-authorised-use>
- For CTACSub/CrO₃: [CTACSub Q&As dd. 24.1.2023](#) - Please check for the latest Q&A updated on the [consortium manager's website](#).
- For CCST/miscellaneous Cr(VI) compounds: [CCST Q&As dd. 8.1.2021](#) – Please check for the latest Q&A updated on the [consortium manager's website](#).
- REACHLaw Ltd. (as service provider): E: info@reachlaw.fi; I: www.reachlaw.fi

Glossary of key terms

Term	Definition
Authorisation number	An authorisation number is unique to each combination of [applicant-substance-use applied for]. If the downstream user is not an applicant but that he relies on an authorisation granted to a manufacturer/importer up his supply chain for his uses, the downstream user will not receive his own authorisation number(s) but he will be informed by his supplier about the authorisation number. The authorisation number is included in the SDS provided by the supplier. It should also be visible on the label of the substance or mixture. It has the format "REACH/x/x/x". If you do not find that number, please contact your supplier. – See also ECHA Q&A 0750 dd. 04/06/2015 and Q&A 1441 dd. 26/10/2017
Downstream user (DU)	<i>Any natural or legal person established within the Community, other than the manufacturer or the importer, who uses a substance, either on its own or in a mixture, in the course of his industrial or professional activities. A distributor or a consumer is not a downstream user. A re-importer exempted pursuant to REACH Article 2(7)(c) shall be regarded as a downstream user – REACH Art. 3(13)</i>
EEA	European Economic Area: All Member States of the European Union (EU) incl. French Guiana, as well as in Norway, Iceland and Liechtenstein. REACH applies in the EEA territory. The UK, Russia, Switzerland or Turkey are not part of the EEA.
'Extended' SDS	A Safety Data Sheet according to REACH with the relevant exposure scenarios in an annex covering identified uses– REACH Art. 31(9)
Use	<i>Any processing, formulation, consumption, storage, keeping, treatment, filling into containers, transfer from one container to another, mixing, production of an article or any other utilization – REACH Art. 31(7)</i>



Henkel AG & Co. KGaA, 40191 Düsseldorf, Germany

To our valued Customers

Date	January 2021	Department	REACH Office Adhesive Technologies
Your message	Cr(VI) Authorisation	Phone	+49 211 797-4200
		Fax	
		E-mail	Reach.adhesives-technologies@henkel.com

REACH Authorisation Chromium Trioxide and Miscellaneous Chromates/Cr(VI) compounds

Dear valued Customer,

After the adoption of several authorisations for Cr(VI) compounds, authorisation numbers and exact use descriptions are now available (see Annex I). Continued use of Cr(VI) compounds is only possible if the use conditions set in the authorisations are met.

As a downstream user you have the following obligations:

- Notify ECHA about your use including key functionalities in some cases. For all Chromium Trioxide uses this is required, for other Cr(VI) compounds you find in the use description (see Annex I), if this applies to your use and in Annex III there are tables with the applicable key functionalities.

We will provide you with easy-to-print pre-formatted Excel Tables to submit to the ECHA upon request.

- Check, assess and implement Exposure scenarios (Annex to Safety Data Sheet) on our website <https://mysds.henkel.com/index.html> . For products containing Chromium Trioxide we will make them available as soon as we received them from our suppliers.
- Conduct workers exposure campaigns according to the Good Practice Sheet GPS E2 (link see below) by filling out the ECHA monitoring report template you find on the bottom of this website:

<https://www.echa.europa.eu/support/dossier-submission-tools/reach-it/downstream-user-authorised-use>

Postal Address:
Henkel AG & Co. KGaA
40191 Düsseldorf, Germany
Registered Office:
Henkelstraße 67
40589 Düsseldorf, Germany
Phone: +49 211 797-0
Fax: +49 211 798-40 08
www.henkel.com

Bank Accounts:
Deutsche Bank AG, Düsseldorf
BIC/SWIFT DEUTDE33, IBAN
DE32 3007 0010 0227 2409 00
Citigroup Deutschland, Frankfurt
BIC/SWIFT CITIDF33, IBAN
DE03 5021 0900 0400 2281 16

Henkel AG & Co. KGaA
Headquarter: Düsseldorf
Commercial Register: District Court of
Düsseldorf, HRB 4724
Chairwoman of the Supervisory Board:
Dr. Simone Bagel-Trah
VAT ID: DE 119 429 301

Personally Liable Partner:
Henkel Management AG, Place of Business:
Düsseldorf
Commercial Register: District Court of
Düsseldorf, HRB 58139
Management Board: Carsten Knobel (CEO),
Jan-Dirk Auris, Sylvie Nicol,
Bruno Piacenza, Jens-Martin Schwärzler,
Marco Swoboda
Chairwoman of the Supervisory Board:
Dr. Simone Bagel-Trah

For our customers in the United Kingdom there is a requirement by the Health & Safety Executive (HSE) to confirm to the agency that you are an existing authorised Downstream user of an EU Authorisation comparable to the ECHA notification for EU27 Downstream Users. You can find more details and links on their website www.hse.gov.uk.

The Authorisation of Chromium Trioxide for the use " Functional chrome plating with decorative character" was not granted, so we are also not supporting this use any more.

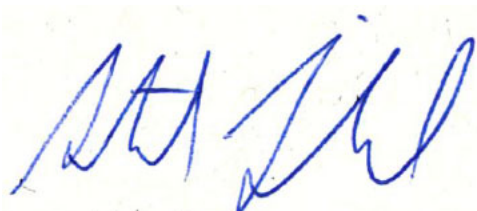
For further details, we highly recommend to read the Question & Answers of the CTAC Consortium in Annex II of this letter.

For Cr(VI) compounds so-called "Good Practice Sheets" (GPS) to handle and monitor the handling according the requirements are available in section 3 of the following website: <https://jonesdayreach.com/substances/>

Please contact your Henkel sales representatives for further information or any questions you may have on future availability of the products.

Disclaimer: Please note that this letter is for information purposes only but shall not create any legally binding obligation between your company on the one hand and Henkel, the undersigned company or any other member of the Henkel group of companies (together referred to as the "Henkel Group") on the other hand. Especially, the Henkel Group does not assume any assurance, guarantee, representation and/or warranty as to the accuracy and/or completeness of the information contained in this letter , its Annexes or provided under the internet links indicated in this letter and does not undertake any separate obligation to update, revise and/or rectify the content of this letter, its Annexes or the internet links indicated in this letter. Any existing contractual arrangement between your company and the Henkel Group shall remain unaffected by this letter.

Sincerely,

A handwritten signature in blue ink, appearing to read "Astrid Geibel", written over a light-colored rectangular background.

Astrid Geibel
REACH Officer
Product Safety & Regulatory Affairs
Adhesive Technologies,
Henkel AG & Co. KGaA

Annex I

Substances, Authorisation Numbers, Uses, Review Periods

For the ECHA notification you only need to submit the Authorisation number for the product you use and the use which applies.

Substance	AuthNumber	Industry	End of Review Period	Use
Dichromtrischromate CAS 24613-89-6 EC 246-356-2	REACH/20/1/0	Formulator	22.01.2026	Formulation of mixtures intended exclusively for uses REACH/20/1/2 and REACH/20/1/3)
	REACH/20/1/1	Distributor for formulators	22.01.2026	Formulation of mixtures intended exclusively for uses REACH/20/1/2 and REACH/20/1/3)
Valid for <u>BONDERITE M-CR 1132 AERO</u>	REACH/20/1/3	Aerospace	22.01.2026	Surface treatment of metals (such as aluminium, steel, zinc, magnesium, titanium, alloys), composites and sealings of anodic films for the aerospace sector in surface treatment processes in which any of the key functionalities listed in the Annex is required
Valid for <u>All other products</u>	REACH/20/1/2	Aerospace	22.01.2026	Surface treatment of metals (such as aluminium, steel, zinc, magnesium, titanium, alloys), composites and sealings of anodic films for the aerospace sector in surface treatment processes in which any of the key functionalities listed in the Annex is required

Substance	AuthNumber	Industry	End of Review Period	Use
Sodium dichromate CAS 10588-01-9 EC 234-190-3 <u>Valid for</u> <u>BONDERITE M-PT</u> <u>BCR</u>	REACH/20/5/1	Formulator	21.09.2024	Use in formulation of mixtures intended exclusively for uses REACH/20/5/3, REACH/20/5/4, REACH/20/5/5, REACH/20/5/6, REACH/20/5/7 and REACH/20/5/8
	REACH/20/5/4	Aerospace	21.09.2024	Use for surface treatment of metals (such as aluminium, steel, zinc, magnesium, titanium, alloys), composites and sealings of anodic films for the aerospace sector in surface treatment processes in which any of the key functionalities listed in the Annex is required
	REACH/20/5/7	Packaging	14.04.2024	Use for electrolytic passivation of tin plated steel for the packaging industry
Sodium dichromate CAS 10588-01-9 EC 234-190-3 <u>Valid for</u> <u>BONDERITE C-IC</u> <u>SMUTGO 4</u> <u>BONDERITE M-CR</u> <u>ALCRM 1200 BR</u> <u>AERO</u>	REACH/20/4/0	Formulator	21.09.2024	Formulation of mixtures for surface treatment of metals (such as aluminium, steel, zinc, magnesium, titanium, alloys), composites and sealings of anodic films and for use for electrolytic passivation of tin plated steel for the packaging industry intended exclusively for uses REACH/20/4/1 and REACH/20/4/2
	REACH/20/4/1	Aerospace	21.09.2024	Surface treatment of metals (such as aluminium, steel, zinc, magnesium, titanium, alloys), composites and sealings of anodic films for the aerospace sector in surface treatment processes in which any of the key functionalities listed in the Annex is required
	REACH/20/4/2	Packaging	14.04.2024	Electrolytic passivation of tin plated steel for the packaging industry
Strontium chromate CAS 7789-06-2 EC 232-142-6	REACH/20/7/2	Formulator	22.01.2026	Formulation of mixtures intended exclusively for uses bearing authorisation numbers REACH/20/7/10 to REACH/20/7/19
	REACH/20/7/12	Aerospace	22.01.2026	Application of primers and specialty coatings in the construction of aerospace and aeronautical parts, including aeroplanes / helicopters, spacecraft, satellites, launchers, engines, and for the maintenance of such constructions for the aerospace sector in which any of the following key functionalities is required: corrosion resistance, adhesion of paint / compatibility with binder system, layer thickness, chemical resistance, temperature resistance (thermal shock resistance), compatibility with substrate or processing temperatures

Substance	AuthNumber	Industry	End of Review Period	Use
Potassium dichromate CAS 7778-50-9 EC 231-906-6	REACH/20/2/0	Formulator	21.04.2024	Formulation of mixtures for surface treatment of metals (such as aluminium, steel, zinc, magnesium, titanium, alloys), composites and sealings of anodic films intended exclusively for use REACH/20/2/1
	REACH/20/2/1	Aerospace	21.04.2024	Surface treatment of metals (such as aluminium, steel, zinc, magnesium, titanium, alloys), composites and sealings of anodic films for the aerospace sector in surface treatment processes in which any of the key functionalities listed in the Annex is required
Sodium Chromate CAS 7775-11-3 EC 231-889-5	REACH/19/32/0	Formulator	21.09.2024	Formulation of mixtures for sealing after anodising, chemical conversion coating, pickling and etching applications by the aerospace sector
	REACH/19/32/2	Aerospace	21.09.2024	Use of sodium chromate for sealing after anodizing, chemical conversion coating, pickling and etching applications by aerospace companies and their suppliers.
Chromium Trioxide CAS 1333-82-0 EC 215-607-8	REACH/20/18/3	Formulator	21.09.2024	Formulation (including reduction to Cr(III))
	REACH/20/18/10	non Aerospace	21.09.2024	Functional Chrome Plating
	REACH/20/18/17	Aerospace	21.09.2024	Surface treatments other than functional chrome plating and functional chrome plating with decorative character
	REACH/20/18/24	non Aerospace	21.09.2024	Surface treatments other than functional chrome plating and functional chrome plating with decorative character
	REACH/20/18/31	Packaging	21.09.2024	Passivation of tin-plated steel (ETP)

PRESS RELEASE

DECEMBER 22, 2020¹

CTACSub (CTAC Submission Consortium)² is pleased to confirm that after a procedure that has taken more than five years and two REACH Committee qualified majority votes in February 2019 and October 2020 respectively, **the European Commission has finally authorized five out of the six applied for essential uses of chromium trioxide (EC 215-607-8; CAS 1333-82-0).**

These Uses are: Use 1 (formulation); Use 2 (hard chrome plating); Use 4 (surface treatment aeronautics and aerospace); Use 5 (miscellaneous surface treatment); and Use 6 (passivation of tin-plated steel (ETP)).

The review period for all Uses will expire on September 21, 2024, thus 7 years after the Sunset Date of chromium trioxide under Annex XIV REACH.

For the remaining not yet decided use, namely functional plating with decorative character (so-called Use 3), CTACSub has submitted, upon request of the European Commission, a Substitution Plan to ECHA on September 24, 2020. This Substitution Plan is based on the input of more than 870 Use 3 Downstream users. We hope that ECHA and the European Commission will quickly scrutinize the Substitution Plan and proceed to authorization of Use 3 in 2021.

The authorization decisions³ contain a number of conditions, which will be challenging to comply with, including on timing. Among others, the authorization holders will have to produce new exposure scenarios and provide those in amended safety data sheets to Downstream Users by March 18, 2021, for them to apply without undue delay. This work is underway. The Downstream Users will have to conduct annual workers exposure and environmental monitoring for the first time at the latest by June 18, 2021.

CTACSub will shortly publish a new Q&A to assist in implementation. Please also refer to the available Good Practice Sheets, both at www.jonesdayreach.com.

Ursula Schliessner, Jones Day, Chair and Consortium Manager of CTACSub explains: *“The authorization holders will now actively work together with Downstream Users to implement the authorization decisions. The success of implementation will heavily depend on whether the Downstream Users will all provide to ECHA complete and accurate monitoring data.”*

As regards the future, CTACSub has recently decided to continue its work and will file a review report. Given that the regulatory requirements for obtaining authorization have become ever more demanding over the past six years, the success of the review report will ultimately depend on the quality and representativeness of the information provided by Downstream Users. For this reason, CTACSub will require the factual and financial collaboration of ALL Downstream Users who wish to be covered by the review report (and thus prolongation of the authorization). For more information on participation in the review report, please see the Q&A and separate communication that will be issued in January 2021.

¹ For additional information, please contact the CTACSub Consortium Manager uschliessner@jonesday.com, tel. +32 2-6451460 or see at www.jonesdayreach.com

² The authorization holders are: Atotech Deutschland GmbH, Boeing Distribution Inc., Chemservice GmbH, CROMITAL S.P.A., Elementis Chromium LLP, MacDermid Enthone GmbH and Prospere Chemical Logistic OÜ.

³ The text of the authorization decision will be annexed to the Q&A.

December 22, 2020

Questions & Answers

CTACSub¹ (CTAC Submission Consortium)

REACH Authorization of Certain Uses of Chromium Trioxide

Question 1: What is the status of these applications for authorization ('AfAs')?

Response: Except for functional plating with decorative character (so-called Use 3), all authorizations have been adopted and published, see the Press Release of the CTACSub Consortium of December 22, 2020 for more details [Press Release CTACSub Consortium December 22 2020](#).

The full texts of the authorization decision ('AD') and the authorization numbers are available at **Annex 3**.

As regards Use 3, CTACSub submitted a Substitution Plan to ECHA on September 24, 2020 as required by the European Commission ("Commission"). ECHA has started to assess this Substitution Plan. Thereafter, the Commission must decide on authorization based on the Opinion of the ECHA SEAC Committee and following vote of the REACH Committee consisting of Member State representatives. We expect this procedure to conclude by mid-year 2021.

Question 2: Will the ADs be valid in the United Kingdom after December 31, 2020 in case there is no trade agreement between the EU and the UK at that time? Will the ADs be valid in the EU after December 31, 2020 if the authorization holder is a UK entity? What about Use 3 in the UK, which has not been decided? What should Downstream Users ('DUs') do?

Response: : As the ADs (except for Use 3) have been issued within the EU-UK Withdrawal Agreement's transition period, they are valid in the EU and the UK during the time of transition (until December 31, 2020; unless prolonged) and thereafter.² Indeed, according to HSE guidance of December 1, 2020,³ *"EU authorisations granted to UK-based holders before the end of the transition period will be recognised ("grandfathered") by UK REACH. This will include the review period and any conditions attached to the authorisation. This will not incur a fee from HSE"*.

For these existing authorisations to be grandfathered, UK-based authorization holders will have to provide HSE within 60 days of the end of the transition period with technical information relating to each authorisation they hold. Specifically, according to the HSE *"If you are a GB-based downstream user of an EU authorisation granted before the end of the transition period and held by an EU/EEA GB or NI [Northern Ireland]⁴-based business entity, you will be able to continue to use that substance in accordance with that authorisation after*

¹ The authorization holders are: Atotech Deutschland GmbH, Boeing Distribution Inc., Chemservice GmbH, CROMITAL S.P.A., Elementis Chromium LLP, MacDermid Enthone GmbH and Prospere Chemical Logistic OÜ.

² Please note, however, that any subsequent authorizations granted to that EU/EEA entity after January 1, 2021 and following the review period for the initial authorization will not be valid for the UK users, and any such authorization requests would need to be made to the UK authorities.

³ Available at: <https://www.hse.gov.uk/brexit/reach-guidance.htm>. Please note that the HSE might revise this guidance on December 31, 2020.

⁴ Please note that EU REACH will continue to apply to Northern Ireland after the end of the transition period. So EU REACH authorizations granted to NI-based entities will be treated the same in the UK as authorizations of EU-based entities. The only difference is that the draft UK REACH requires that the substance in respect of which the application is made in the UK is a qualifying Northern Ireland good ("QNIG"). A substance is a QNIG if it is a QNIG on its own, or contained in a mixture or article that is a QNIG.

the end of the transition period until the existing EU authorisation relating to the use of the substance ceases to have effect.”⁵

Similar to the UK-based authorization holders, within 60 days of the end of the transition period, UK-based DUs will have to provide the HSE with information on their identity, the conditions of the EU REACH authorization, as well as on the identity of their EU supplier.

Therefore, it is clear that the ADs (except for Use 3) granted before the end of the transition period will be recognized in the UK as of January 1, 2021.

As far as the EU authorization holders are UK legal entities, these ADs will become void in the EU at the end of the transition period. Thus, as of January 1, 2021, DUs in the EU can no longer rely on upstream supplies from a UK legal entity. In order for those supplies to continue, the UK authorization holder will have to transfer its authorization (and possibly REACH registration) to an EU legal entity, which then in turn can supply to the EU market as of January 1, 2021.⁶

The situation for Use 3 is different. Although the AfA for Use 3 has been at its final stage in the EU (i.e. Commission level), as noted above, the request of the Commission to provide a Substitution Plan triggers a supplemental opinion by SEAC. That supplemental opinion, however, will only be issued after January 1, 2021. According to the preliminary views of the HSE not published as official guidance, this “hybrid” situation would be treated as an AfA at an early stage of the process. Specifically, the HSE guidance of December 1 stipulates that *“If you are based in Great Britain and have submitted an authorisation application under EU REACH but ECHA has not finalised its compiled RAC/SEAC opinions under Article 64(5) by the end of the transition period, you’ll need to resubmit your dossier to HSE to continue placing a substance on the GB market or using it in Great Britain after the sunset date.”⁷*

In other words, a new AfA for Use 3 must be submitted to the HSE after January 1, 2021. In that respect, the UK is moving the latest application date (“LAD”) to 18 months after the end of the transition period, provided that the following three cumulative conditions under Article 127GA of the draft UK REACH are met first:

- (i) the application was made to ECHA before the EU LAD;
- (ii) the LAD is before the end of the transition period;
- (iii) the sunset date is on or after 29 March 2017.

Therefore, a new AfA for Use 3 can be filed within the UK 18 months after January 1, 2021. Chromium trioxide can be used for Use 3 during that 18 months period and thereafter whilst the AfA will be pending in the UK and if supplied by one of the UK applicants.

In addition, we have received the following written information from the UK HSE – which is also not captured in official HSE guidance and can therefore not necessarily be relied upon:

Question (2a): Who can file such an application in the UK, the same EU entity which had applied for authorization in the EU or must it be an UK entity (acting on behalf of the EU one)? Are upstream applications permissible in the UK or must a downstream user apply?

⁵ Available at: <https://www.hse.gov.uk/brexit/scenario5.htm>.

⁶ Please note that this will not apply to NI-based authorization holders, as REACH will continue to apply to NI after the transition period. Therefore, NI-based entities will continue to be treated as EU-based entities under the regime of REACH.

⁷ Available at: <https://www.hse.gov.uk/brexit/scenario7.htm>.

Response: Only UK entities or ORs can apply. Upstream applications are permissible, but will of course only cover UK downstream users.

Please contact the HSE REACH helpdesk for further information and any update on the information provided above: UKREACHCA@hse.gov.uk

Question 3: Will the CTACSub members seek to extend their authorizations and thus introduce review reports at the latest 18 months before the end of the respective review periods?

Response: CTACSub has decided to continue its work and will file a review report. The details still have to be determined. However, given that the regulatory requirements for obtaining authorization have become ever more demanding over the past six years, the success of the review report will ultimately depend on the quality and representativeness of the information provided by DUs. For this reason, CTACSub will require the factual and financial collaboration of ALL DUs who wish to be covered by the review report (and thus prolongation of the authorization).

As a next step, CTACSub will publish in January 2021 a call for participation of DUs, which will remain open until March 30, 2021. The responses to this call for participation will determine for which uses the review report will be filed. We cannot guarantee now, and pending the results of the call for collaboration, whether review reports will be filed for Uses 3 (functional chrome with decorative character), 4 (aerospace), 5 (miscellaneous surface treatment) and 6 (ETP). We expect that, at least, there will be a larger number of DUs interested in Use 2. Please note that deliveries to DUs that will not collaborate for the review report are expected to stop at the end of the respective review period (September 21, 2024).

Several companies in the Aerospace and Defence ('A&D') sectors have formed a new consortium⁸ to support renewal of upstream authorizations for the use of chromates in these sectors only. Relevant portions of CTACSub uses 1, 2, 4 and 5 will be represented.

Question 4: What immediate steps do DUs have to take now (all authorized uses)?

Response:

Date	Action
March 18, 2021	Authorization holders to draw up and distribute (as annexes to safety data sheets) specific exposure scenarios for representative processes, operations and individual tasks. DUs to implement these exposure scenarios without undue delay.
Around March 22, 2021 ⁹	DUs to notify uses to ECHA under Art. 66 REACH. DUs also to notify their key functionalities and a justification for the necessity of the key functionalities to ECHA under Article 66 REACH. The information must be provided in the ECHA notification tool (see Annex 1).
June 18, 2021	Downstream users to finish <u>first</u> occupational exposure measurements and air and waste water monitoring campaigns. For the templates to be used for monitoring, please see the GPS and the safety data sheets of the suppliers.

⁸ Details of the Aerospace and Defence Reauthorization Consortium can be found at <https://www.adcr-consortium.eu/>

⁹ According to Article 66 REACH, DUs must submit the notification within 3 months of the first delivery of the substance after the authorization decision has been published. In order to avoid problems with the date of applicability of this obligation in case a DU is still using up stocks from suppliers with authorization who previously delivered on the basis of a pending application, we recommend, out of an abundance of caution, to file the notification 3 months after the date of publication of the authorization decision. At the date of this Q&A, this publication has not yet occurred. Art. 66(1) REACH: "Downstream users using a substance in accordance with Article 56(2) shall notify the Agency within three months of the first supply of the substance."

December 12, 2021	Downstream users to notify data from occupational exposure measurements and air and waste water monitoring to ECHA in the Article 66 framework. This should be done as an amendment of the earlier Art. 66 REACH notification.
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CTACSub will organize a **webinar on January 15, 2021, 3pm – 4.30pm (Brussels time)** to brief DUs about their obligations from authorization. To sign up to this webinar, please click here: <https://register.gotowebinar.com/register/5569451217499389963>. The slides of this webinar will be available in several EU languages. The recording of the webinar can be viewed from www.jonesdayreach.com.

Question 5: What do DUs have to do in relation to Use 3?

Response: CTACSub has submitted a Substitution Plan for Use 3 to ECHA. CTACSub hopes that Use 3 will be authorized in 2021. However, given the continued uncertainty, CTACSub strongly recommend that where feasible, DUs file their own AfAs for Use 3. CTACSub also recommend that companies with Use 3 operations conduct exposure monitoring according to the Good Practice Sheets in the interim period.

Question 6: What impact do the ADs have for DUs?

Response: DUs in the supply chain of the applicants can continue their uses until the end of the review periods September 21, 2024 if they can demonstrate to the competent authorities of the EU Member States that they belong to the same supply chain as the authorization holders, their uses fit within the use descriptions of the ADs, they are compliant with the operational conditions and risk management measures set out in the AfAs (see the chemical safety report) and the ADs, and the conditions of the ADs are complied with.

Question 7: Is there any practical guidance available that DUs can utilize to adapt their operating conditions?

Response: YES. CTACSub has developed and published¹⁰ a series of easy to understand illustrative practical Task Sheets ('Good Practice Sheets'; 'GPS') that set out the operational conditions and risk management measures that are recommended when handling chromium trioxide. The GPS also contain advice on personal protective equipment and exposure / emissions monitoring. The GPS do not replace the exposure scenarios in the safety data sheets, but both are consistent. The GPS are just easier to understand for non-experts.

Please see GPS here www.jonesdayreach.com.

Question 8: How will a DU know whether the chromium trioxide he uses originates (was supplied directly or indirectly) from one or more of the CTACSub authorization holders?

Response: The labels and safety data sheets of the substance/preparations will contain authorization numbers. The authorization numbers are 'use'-specific, so DUs need to select for their Article 66 ECHA notification the specific authorization number(s) that correspond to their use. Authorization numbers have the format 'REACH/x/x/x'. In case distributors or formulators supply the substance in mixtures or they have several suppliers for chromium trioxide, the safety data sheets and labels may possibly contain several authorization numbers. It is important that DUs do not accept any deliveries without authorization numbers (unless they receive their chromium trioxide from a supplier whose application is still pending), as they will critically need those numbers for their Article 66 ECHA notification.

¹⁰ <https://jonesdayreach.com/substances/>

Question 9: Can a DU continue to use a substance that he holds in stock previously received from a supplier who does not hold an authorization (or has no application pending before the latest application date of the respective substance)?

Response: NO.

Question 10: Can a DU continue to use a substance that he holds in stock previously received from a supplier who does not include an authorization number in its label? Response: NO, unless the AfA of this supplier is not decided as yet and was filed before the Latest Application Date.

Question 11: What does a DU do in case of an inspection?

Response: In case of an inspection, the inspector will ask the DU for his Article 66 REACH notification. The DU should also be able to demonstrate and have documented by a self-assessment that his activity falls within the scope of the ADs, that he complies with them including that he applies as a minimum the operational conditions and risk management measures described in the AfAs and ADs. Moreover, he should demonstrate that he is compliant with national legislation on health & safety at the workplace, including occupational exposure limits, the obligation to make a safety assessment for each workplace and to observe the hierarchy of prevention measures for carcinogens at the workplace.



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Annex II

Q&A CTAC Consortium

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Annex 1

Note for Downstream Users on Article 66 REACH notifications

If you are a downstream user ('DU') of chromium trioxide delivered directly or indirectly (e.g. through a formulator or distributor) from any of the CTACSub authorization holders, you are obliged to notify your uses to the European Chemicals Agency ('ECHA') under Article 66 REACH within three months of the publication of the authorization Decision. If you do not comply with this obligation, you might be imposed a fine by your national enforcement authority, and/or the national authority may ask you to stop the use of the substance until you have filed the Article 66 notification with ECHA.

You must submit your Article 66 notification electronically in an on-line form made available by ECHA on its REACH-IT system. This means that as a **first step** – unless you have previously done this already for other reasons - you must 'open a REACH-IT account'. Please note down your User name and Password when opening the account. Once this first step is completed, you can submit as a **second step** your Article 66 notification through REACH-IT. In order to do so, you will need to prepare and have the following minimum information at hand:

- ✓ The name of your company, the address of the sites where the substance is used, and the relevant contact details.
- ✓ The substance and the name of the authorized use, which are identified by the authorization number. You will find the authorization number on the label and/or Safety Data Sheets (SDS) furnished by your substance supplier. The Article 66 notification template provides a drop-down list of all authorization numbers from which you must choose one.
- ✓ A **brief explanation of key functionalities required for the DU's use** (see the key functionalities per substance and use in the texts of the AD and as set out in Annex 2 and the **related justification (why the key functionalities are necessary)**). This information must be entered into the Art. 66 ECHA REACH IT tool under the section "*Further description of your use*". Please be very diligent and comprehensive when entering this information. Your supplier may be able to assist you in filling in this information.
- ✓ If you obtain your substance or formulation from more than one supplier, you have to file as many notifications as the number of your suppliers. In order to avoid double counting of tonnage and workers exposed, you have to, in the case of more than one supplier, split the number of workers exposed and the tonnage received so that the figure is accurate.
- ✓ The usual annual volume and the number of workers using the substance (this is voluntary information).
- ✓ A brief additional description of your use (e.g. the type of products you manufacture or the market segments where they are supplied) and any involvement in substitution activities (again, this is voluntary information).

After you are finished with filing your notification, you should write down the 'submission number' and print the report of your notification. You will need the submission number for any future notification updates.

Very importantly, since the authorizations have been granted with conditions, DUs have to comply with these conditions. This means that all DUs who rely on the above authorizations **have to conduct annual workers exposure and environmental (air emissions and wastewater) monitoring, and the results of this monitoring must be submitted to ECHA in the Article 66 notification.** For applicable dates, please see **Q&A above**. DUs should use the monitoring templates issued with the SDS and as **GPS E2 and E3** for compliance with the authorization Decisions' monitoring requirements. CTACSub recommend not to submit

monitoring data under the Article 66 notification in the initial Article 66 notification but only when DUs have conducted their first measurement campaigns with the new monitoring templates. This can be easily done by an **'update' of the earlier Article 66 notification.**

Be aware that the monitoring data will have to be uploaded in an Annex of the Article 66 notification.

Confidentiality Issues

Please note that ECHA publishes certain information from the Article 66 notifications, i.e. the substance name, the Member State where the use takes place, whether the notification's status is active or inactive and the tonnage band in an aggregated form, if quantity data was provided. On the other hand, certain information notified under Article 66 is provided **automatically** to the authorization holders, namely the monitoring data referred to above. You can therefore not prevent the monitoring data being submitted to the authorization holders. All you can do is to delete your company identification from the monitoring data, so that your company identity is not revealed to the authorization holders.

DUs have the right to claim confidentiality on their company name, location of the site of use, name of the notified use, brief additional description of use (e.g. the information on key functionalities and justification), and information on substitution activities. If you do not claim confidentiality, ECHA will publish these details too. If you claim confidentiality, you will have to provide justifications for the confidentiality claim to ECHA.

As already noted above, Article 66 notifications can be updated at any time. Therefore, changes can be made including on the data reported and the annexes supplied.

Further practical guidance on how to submit your Article 66 REACH notification to ECHA is provided in the following links:

- [ECHA Video tutorial on how to submit a downstream user notification HIGHLY RECOMMENDED!!](#)
- [Downstream user notifications of authorized uses: Information made public by ECHA](#)

Annex 2

Key Functionalities and Justification thereof

Key Functionality	Justification of Key Functionality
Use 2	
Hard chrome plating. Functional chrome plating where any of the following key functionalities is necessary for the intended use	
Wear resistance	Wear resistance is the ability to withstand gradual loss of material due to friction or mechanical stress. This functionality is provided by functional chrome plating and prevents failure of the coated parts, extends their service life and ensure optimal performance.
Hardness	Hardness is the resistance of solid materials to various kinds of permanent shape changes when a force is applied. Functional chrome coating provides the coated part with high surface hardness and by this to resist against high mechanical pressures occurring during use.
Layer thickness	Layer thickness is directly related to other key functionalities such as corrosion and wear resistance. Functional chrome coatings can be applied in variable layer thicknesses and by this enable interconnected functionalities to perform optimal during use.
Corrosion resistance	Corrosion resistance is the ability of a metal to withstand gradual degradation caused by chemical reactions with the environment. Functional chrome coatings provide the coated parts with high resistance to oxidation caused by exposure to humidity, air or other chemicals present during use.
Coefficient of friction	Friction occurs between contacting surfaces of solids in motion. The coefficient of friction (surface roughness) is a measure for the force required to move the contacting parts against each other. Functional chrome coating provides the coated part with an adjustable but generally low coefficient of friction and by this ensures correct interaction with contacting surfaces during operation, thereby ensuring its optimal performance.
Effect on surface morphology	Surface morphology describes the surface characteristics of the applied coating that enable specific properties. The presence and density of cracks on the resulting chrome layer has an influence on the performance of the coating and on other functionalities such as corrosion resistance and adhesive properties.

Key Functionality	Justification of Key Functionality
Use 4	
Surface treatment aeronautics and aerospace. Surface treatment for applications in the aeronautics and aerospace industries, unrelated to functional chrome plating or functional chrome plating with decorative character, where any of the following key functionalities is necessary for the intended use	Please see examples on site: https://jonesdayreach.com/substances/#supsystemic-table-11 under Table IV
Corrosion resistance/active corrosion inhibition	Corrosion resistance is the ability of a metal to withstand gradual degradation caused by chemical reactions with the environment. Active corrosion inhibition is the ability of a material to spontaneously repair small amounts of chemical or mechanical damage that exposes areas of metal without any surface protection. This functionality extends the service life of parts, prolongs maintenance intervals and enhances on-flight security of air travellers.
Chemical resistance	Chemical resistance is defined as the ability of solid materials to resist damage by exposure to chemicals such as oils and lubricants. Resistance to chemicals reduces maintenance costs and enhances safety.
Hardness	Hardness is the resistance of solid materials to undergo permanent shape changes when a force is applied. High surface hardness is required to withstand high mechanical pressures during operation. This ensures the correct performance of the coated part
Adhesion promotion (adhesion to subsequent coating or paint)	Adhesion promotion is the ability to enable the correct binding of dissimilar particles or surfaces to one another (for example adhesion of coating to substrate, adhesion of paint to coating and/or substrate). Proper adhesion between coating layers ensures the correct performance of the overall coating and thus of the coated part.
Temperature resistance	Temperature resistance is the capacity to preserve integrity and performance upon exposure to extreme temperatures. Temperature resistance is required to provide aircraft components with the ability to withstand the effects of repeated exposure to extreme ranges of temperatures during operation.
Resistance to embrittlement	Resistance to embrittlement is the ability of the coating material to resist exposure to environmental conditions (e.g. temperature, UV light, humidity, etc.) without showing degradation. This functionality is required to

Key Functionality	Justification of Key Functionality
	avoid failure caused by exposure to the environment.
Wear resistance	Wear resistance is the ability to resist the gradual loss of material due to friction or mechanical stress. Wear resistance is required to avoid failure arising from progressive material loss due to friction or mechanical stress during operation.
Surface properties impeding deposition of organisms, layer thickness, flexibility	Microorganism present in the environment or on working fluids might deposit on the surface of coated parts, where they can promote corrosion. This functionality is required to prevent corrosion due to the action of microorganisms that may grow on the surface of coated parts, ensuring their optimal performance.
Layer thickness	The applied coating must have an appropriate thickness to ensure its proper functioning. This parameter directly affects the performance of the coating and is crucial for enabling other functionalities such as corrosion and wear resistance.
Flexibility	Flexibility is the ability to expand and contract without failure or breaking. Parts must be flexible in order to withstand repeated expansion and contraction caused by temperature changes.
Resistivity	Resistivity is a measure of a material's ability to facilitate or impede the flow of electric current. This functionality is required to provide low electrical contact resistance, as aerospace applications require an electrically conductive coating for the respective use.
Use 5	
Miscellaneous surface treatment. Surface treatment (except passivation of tin-plated steel (electrolytic tin plating - ETP)) for applications in architectural, automotive, metal manufacturing and finishing, and general engineering industry sectors, unrelated to functional chrome plating or functional chrome plating with decorative character, where any of the following key functionalities is necessary for the intended use	
Corrosion resistance/active corrosion inhibition	Corrosion resistance is the ability of a metal to withstand gradual degradation caused by chemical reactions with the environment. Active corrosion inhibition is the ability of a material to spontaneously repair small amounts of chemical or mechanical damage. This is needed to ensure

Key Functionality	Justification of Key Functionality
	performance and extend the service life of the treated parts/surfaces.
Layer thickness	The applied coating must have an appropriate thickness to ensure its proper functioning. This parameter directly affects the performance of the coating and is crucial for enabling other functionalities such as corrosion and wear resistance.
Adhesion promotion (adhesion to subsequent coating or paint)	Adhesion promotion is the ability to enable the correct binding of dissimilar particles or surfaces to one another, such as paint particles to substrate materials. Proper adhesion between coating layers ensures the correct performance of the overall coating and thus of the coated part.
Resistivity	Resistivity is a measure of a material's ability to facilitate or impede the flow of electric current. The high electrical surface resistivity provided by chrome coatings prevents the occurrence of eddy currents. This is important for energy efficiency and optimal performance.
Chemical resistance	Chemical resistance is the ability of solid materials to withstand damage by exposure to chemicals such as oils and lubricants. This is required to protect surfaces against humidity and chemicals, enabling correct functionality over entire service life.
Wear resistance	Wear is the gradual loss of material due to friction or mechanical stress. This functionality is required to avoid failure during operation and to extend the service life of parts.
Electrical conductivity	Electrical conductivity is a measure of a material's ability to conduct electricity. The electrical conductivity of the treated parts and surfaces must remain constant to ensure optimal performance.
Compatibility with substrate	Coatings and substrate materials must be compatible with each other. This is required to ensure the correct interaction between the applied coating and the treated part/surface, ensuring the correct performance of the coating.
Temperature resistance	Temperature resistance is the capacity to preserve integrity and performance upon exposure to extreme temperatures. Temperature resistance is required to provide components with the ability to withstand the effects of repeated exposure to extreme ranges of temperatures during operation.
Food safety	This parameter relates to the possibility of using treated parts and surfaces for the processing of foodstuffs. Components intended for contact

Key Functionality	Justification of Key Functionality
	with foodstuffs have special requirements that must be met to protect consumers.
Coating tension (coefficient of thermal expansion)	Coating tension has a direct effect on the magnetic properties of the coated substrate. The coating requires a low coefficient of thermal expansion to maintain its tensile strength needed to transmit imparted tension on metal substrate and to reduce magnetostriction. This functionality is highly relevant for energy efficiency and noise reduction of electric components/machines.
Electric insulation (resistivity)	Electric insulation is the capacity to restrict the flow of electrical current. This parameter influences the performance of parts or surfaces subjected to a magnetic field or electric current. Electrical insulation is required for their correct functioning.
Deposition speed	The deposition speed describes the rate at which the coating molecules are deposited on the surface of the substrate. The deposition speed of the coating material must be suitable for the application method used. An adequate deposition speed is needed to ensure the continuity of the production process.
(Thermo) optical properties (visual appearance)	The treated parts/surfaces must not show any aesthetic defects that could suggest failures or deficiencies. This is required to ensure the quality of the coating.

Annex III

Technical Function Tables

These technical functionalities have to be included into the REACH-IT submission to the ECHA to notify the use of authorised Cr(VI) compounds

Substance	Process Type	Process	Quantifiable Key Functionality
Dichromtrischromate CAS 24613-89-6	Main Treatment	Chemical / Chromate conversion coating CCC – Aluminium CCC	Corrosion resistance Adhesion to subsequent layer Chemical resistance Active corrosion inhibition Resistivity
	Main Treatment	Chemical / Chromate conversion coating CCC – Magnesium CCC	Corrosion resistance Adhesion to subsequent layer Chemical resistance Active corrosion inhibition Resistivity
	Post-treatment	Sealing after anodizing (with subsequent paint or unpainted)	Corrosion resistance Layer thickness Adhesion to subsequent layer Chemical resistance
	Post-treatment	Chromate Rinsing after phosphating	Corrosion resistance Adhesion to subsequent layer
	Post-treatment	Passivation of metallic coatings	Corrosion resistance Layer thickness Adhesion to subsequent layer Chemical resistance Temperature resistance Resistivity

Substance	Process Type	Process	Quantifiable Key Functionality
Sodium dichromate 10588-01-9	Pre-treatment	Cleaning Pickling/Etching Deoxidising Desmutting Stripping	These processes are pre-treatment processes used in conjunction with a main or post-treatment process. The key functionalities are defined by the subsequent processes.
	Main Treatment	Chemical / Chromate Conversion Coating CCC – Aluminium CCC	Corrosion resistance Adhesion to subsequent layer Chemical resistance Active corrosion inhibition Resistivity
	Main Treatment	Chromate Conversion Coating CCC – Magnesium CCC	Corrosion resistance Adhesion to subsequent layer Chemical resistance Active corrosion inhibition Resistivity
	Main Treatment	Passivation of stainless steel	Corrosion resistance Adhesion to subsequent layer Embrittlement / heat treatment
	Post-treatment	Sealing after anodizing (with subsequent paint or unpainted)	Corrosion resistance Layer thickness Adhesion to subsequent layer Chemical resistance
	Post-treatment	Chromate Rinsing after phosphating	Corrosion resistance Adhesion to subsequent layer
	Post-treatment	Passivation of metallic coatings	Corrosion resistance Layer thickness Adhesion to subsequent layer Chemical resistance Temperature resistance Resistivity

Substance	Process Type	Process	Quantifiable Key Functionality
Potassium dichromate 7778-50-9	Pre-treatment	Cleaning Pickling/Etching Deoxidising Desmutting Stripping	These processes are pre-treatment processes used in conjunction with a main or post-treatment process. The key functionalities are defined by the subsequent processes.
	Main Treatment	Chemical / Chromate Conversion Coating (CCC), including Phosphating - Aluminium CCC	Corrosion resistance Adhesion to subsequent layer Chemical resistance Active corrosion inhibition Electrical Conductivity (Resistivity)
	Main Treatment	Chemical / Chromate Conversion Coating (CCC), including Phosphating - Magnesium CCC	Corrosion resistance Active corrosion inhibition Layer thickness Adhesion to subsequent layer Chemical resistance Electrical Conductivity (Resistivity)
	Main Treatment	Chemical / Chromate Conversion Coating (CCC), including Phosphating - Other CCC	Corrosion resistance Active corrosion inhibition Layer thickness Adhesion to subsequent layer Chemical resistance Electrical Conductivity (Resistivity)
	Main Treatment	Passivation of stainless steel	Corrosion resistance Adhesion to subsequent layer Embrittlement / heat treatment
	Main Treatment	Electroplating	Hardness Layer thickness Corrosion resistance Abrasion / wear resistance
	Post-treatment	Sealing after anodizing (with subsequent paint or unpainted)	Corrosion resistance Layer thickness Adhesion to subsequent layer Chemical resistance
	Post-treatment	Chromate rinsing after phosphating	Corrosion resistance Adhesion to subsequent layer
	Post-treatment	Passivation of metallic coatings	Corrosion resistance Layer thickness Adhesion to subsequent layer Chemical resistance Temperature resistance Resistivity



Henkel AG & Co. KGaA, 40191 Düsseldorf, Germany

To our valued Customers

Date	January 2021	Department	Henkel Adhesive Technologies – Aerospace, Space & Rail
Your message	Cr(VI) Authorisation	Phone	+49 211 797-0
		Fax	
		E-mail	

Henkel products for the Aerospace Industry – Update information on REACH Authorization

Dear valued Customer,

After the adoption of several authorizations for Cr(VI) compounds, authorization numbers and exact use descriptions are now available and have been communicated through the information letter ‘REACH Authorization Chromium Trioxide and Miscellaneous Chromates/Cr(VI) compounds’ of January 2021. We would like to give you an additional update about the implication on Henkel Aerospace products.

1) Products covered by supplier authorization containing Chromium Trioxide CAS 1333-82-0

Product / Substance	AuthNumber	Industry	End of Review Period	Use
BONDERITE M-CR 600 AERO	REACH/20/18/17	Aerospace	21.09.2024	Surface treatments other than functional chrome plating and functional chrome plating with decorative character
BONDERITE M-CR 1001 AERO				
BONDERITE M-CR 1200 AERO				
BONDERITE M-CR 1200S AERO				
BONDERITE M-CR 1500 AERO				
BONDERITE C-IC SMUTGO 4D50 AERO				
BONDERITE M-CR ALUMIGOLD LIQUID AERO				
BONDERITE C-IC SMUTGO 1 AERO				
BONDERITE C-IC DEOXDZR 6 MU				
BONDERITE C-AD DEOXDZR 16 R				
BONDERITE M-CR ALCRM 1200 AERO				

Postal Address:
Henkel AG & Co. KGaA
40191 Düsseldorf, Germany
Registered Office:
Henkelstraße 67
40589 Düsseldorf, Germany
Phone: +49 211 797-0
Fax: +49 211 798-40 08
www.henkel.com

Bank Accounts:
Deutsche Bank AG, Düsseldorf
BIC/SWIFT DEUTDEDD, IBAN
DE32 3007 0010 0227 2409 00
Citigroup Deutschland, Frankfurt
BIC/SWIFT CITIDEFF, IBAN
DE03 5021 0900 0400 2281 16

Henkel AG & Co. KGaA
Headquarter: Düsseldorf
Commercial Register: District Court of
Düsseldorf, HRB 4724
Chairwoman of the Supervisory Board:
Dr. Simone Bagel-Trah
VAT ID: DE 119 429 301

Personally Liable Partner:
Henkel Management AG, Place of Business:
Düsseldorf
Commercial Register: District Court of
Düsseldorf, HRB 58139
Management Board: Carsten Knobel (CEO),
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Bruno Piacenza, Jens-Martin Schwärzler,
Marco Swoboda
Chairwoman of the Supervisory Board:
Dr. Simone Bagel-Trah

2) Products covered by supplier or Henkel authorization

Product / Substance	AuthNumber	Industry	End of Review Period	Use
BONDERITE M-CR 1132 AERO Dichromtrischromate CAS 24613-89-6 EC 246-356-2	REACH/20/1/3	Aerospace	22.01.2026	Surface treatment of metals (such as aluminum, steel, zinc, magnesium, titanium, alloys), composites and sealings of anodic films for the aerospace sector in surface treatment processes in which any of the key functionalities listed in the Annex is required
BONDERITE C-IC SMUTGO 4 AERO Sodium dichromate CAS 10588-01-9 EC 234-190-3	REACH/20/4/1	Aerospace	21.09.2024	Surface treatment of metals (such as aluminum, steel, zinc, magnesium, titanium, alloys), composites and sealings of anodic films for the aerospace sector in surface treatment processes in which any of the key functionalities listed in the Annex is required
BONDERITE M-CR ALCRM 1200 BR AERO Sodium dichromate CAS 10588-01-9 EC 234-190-3	REACH/20/4/1	Aerospace	21.09.2024	Surface treatment of metals (such as aluminum, steel, zinc, magnesium, titanium, alloys), composites and sealings of anodic films for the aerospace sector in surface treatment processes in which any of the key functionalities listed in the Annex is required
BONDERITE M-CR ALCRM 1200 BR AERO Potassium dichromate CAS 7778-50-9 EC 231-906-6	REACH/20/2/1	Aerospace	21.04.2024	Surface treatment of metals (such as aluminum, steel, zinc, magnesium, titanium, alloys), composites and sealings of anodic films for the aerospace sector in surface treatment processes in which any of the key functionalities listed in the Annex is required
LOCTITE EA 9258.1 AERO Strontium chromate CAS 7789-06-2 EC 232-142-6	REACH/20/7/12	Aerospace	22.01.2026	Application of primers and specialty coatings in the construction of aerospace and aeronautical parts, including airplanes / helicopters, spacecraft, satellites, launchers, engines, and for the maintenance of such constructions for the aerospace sector in which any of the following key functionalities is required: corrosion resistance, adhesion of paint / compatibility with binder system, layer thickness, chemical resistance, temperature resistance (thermal shock resistance), compatibility with substrate or processing temperatures
BONDERITE C-AK 4316 AERO Sodium Chromate CAS 7775-11-3 EC 231-889-5	REACH/19/32/2	Aerospace	21.09.2024	Use of sodium chromate for sealing after anodizing, chemical conversion coating, pickling and etching applications by aerospace companies and their suppliers.



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Please contact your Henkel sales representatives for further information or with any questions you may have.

Disclaimer: Please note that this letter is for information purposes only but shall not create any legally binding obligation between your company on the one hand and Henkel, the undersigned company or any other member of the Henkel group of companies (together referred to as the "Henkel Group") on the other hand. Especially, the Henkel Group does not assume any assurance, guarantee, representation and/or warranty as to the accuracy and/or completeness of the information contained in this letter, its Annexes or provided under the internet links indicated in this letter and does not undertake any separate obligation to update, revise and/or rectify the content of this letter, its Annexes or the internet links indicated in this letter. Any existing contractual arrangement between your company and the Henkel Group shall remain unaffected by this letter.

Sincerely,

A handwritten signature in blue ink, appearing to read "Schütte".

Anke Schütte
Regional TCS Manager EIMEA
Henkel Adhesive Technologies – Aerospace, Space & Rail