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Royal DSM www.dsm.com/paint

DSM Resins and Functional Materials provides transparency about its Chemicals Strategy for Coating Resins products.

This document presents the details of DSM's strategy to accelerate the phase-out of all Chemicals of High Concern from our finished products within our Coating Resins and Functional Materials (CRFM) business segment. This journey has already started, and it is our ambition to have no sales of products containing chemicals of high concern by 2025.

The chemicals we use and the products we produce are one of the foundations on which the modern economy and society is built. They are fundamental to how we feed, entertain, travel, cure and protect ourselves and the materials around us.

DSM is proud of the role it plays in addressing these key societal needs. We have deep experience and expertise in the technologies that are the building blocks for sustainable coatings products and decided decades ago that we needed alternatives to solvent based solutions. We pursued this objective by divesting our solvent business, replacing Chemicals of Concern and innovating new sustainable technologies, such as water-based, powder, plant-based and UV technologies.

Our future is high performance products that are healthy to work with, and environmentally sustainable. Answering the demand for products that don't pollute, is not just the right thing to do morally, we believe it goes beyond being a good business idea. It is the only long-term business strategy.

As a purpose-led, performance-driven company, sustainability is the core value of our company, and we recognize there are risks associated with using certain chemicals. We take responsibility for minimizing possible safety risks and adverse effects on human or animal health and on the environment, that could be caused by chemicals present in our finished products throughout the value chain and life cycle.

We believe that minimizing these risks is also necessary for promoting and enabling recycling and the creation of the circular economy - a key strategic objective for DSM. Our commitment to sustainable innovation is already making a very signification contribution to addressing concerns about the use of chemicals.

Explaining our phase-out targets for Chemicals of Concern

Phasing-out Chemicals of High Concern is one of the pillars of the new CRFM's Purpose and Sustainability strategy, which reinforces DSM's Purpose-led, Performance-driven Strategy. We have already started this journey, and it's our ambition to have no sales of products containing Chemicals of High Concern by 2025. With this acceleration we want to become the sustainability leader in the coatings industry, with a clear and transparent policy that is ahead of future regulatory changes.

The success of this strategy is connected to our definition of Chemicals of High Concern, and our ambitions for phasing them out. Chemicals of High Concern are in our view carcinogens, mutagens, reproductive toxicants (CMRs), and persistent, bioaccumulative and toxic (PBTs).

We are working to actively phase-out Chemicals of High Concern from our finished products. We will start by phasing out NMP (N-Methyl-2-Pyrrolidone CAS: 872-50-4) by July 2020. This will be followed by a second wave of chemicals, namely all Chemicals of High Concern labelled as CMRs 1 A/B and PBTs with the aim to phase them out by 2025.

Additional clarifications regarding our phase-out targets

Whilst realizing our strategy, we aim to be transparent about our decision-making, and to explain how the need to maintain our competitive position, and other factors, may place limits on our ability to take certain decisions. Therefore, in certain very specific circumstances we may allow ourselves the following exceptions:

- When we are absolutely confident that any downstream risks can be managed through responsible care procedures and extended producer responsibilities.
- The chemistry we apply could be characterized as "reactive chemistry" where substances may decompose or form new substances that may not be harmful. Residuals of reactants may be contained in finished products if they are at ppm or even ppb levels. To ensure they do not pose a risk to humans, animals and the environment thresholds are specified per raw material and determined by specific quality control procedures that we have or will develop.
- Non-intentionally added substances which are managed by specific quality control procedures which ensure they do not pose a risk.
- In cases where chemicals are subject to changes in hazard classification and/or labelling, we may need to define a tailored approach for these chemicals as it may not be feasible to comply with the 2025 deadline.
- Although the strategy also applies to recent and future acquisitions, we may need to have adjusted timelines for achieving these targets.

Ensuring the safe use of chemicals in our portfolio

Product Stewardship is a cornerstone of our sustainability strategy. We apply industry leading Safety, Health and Environment (SHE) standards to the safe handling of chemicals at our production facilities and, as suggested by our targets, we are working to only bring to market finished products that are safe.

We work closely with other parties/stakeholders in our supply chain to increase transparency and to continuously improve the management of the health, safety and environmental aspects of a chemical throughout its life cycle. Transparency and disclosure of our product ingredients is very important in ensuring our customers can fulfil their regulatory and legal obligations and can comply with third-party certifications and ecolabels.

Innovating to reduce the dependence on harmful chemicals

DSM is committed to driving sustainable innovation. Safe by design is the leading principle that underpins our approach to developing more sustainable products and processes. We select safer ingredients in our innovation projects and enable our customers to do the same through new, innovative and safer solutions. Hence, Chemicals of High Concern are not accepted in any new CRFM products.

Safe by design is already delivering results. We have successfully phased out various Chemicals of High Concern, introduced bio-based coatings, and are redesigning products from scratch, including carpets and mattresses, which are safe and fully recyclable.

We are committed to replacing Chemicals of High Concern with safer alternatives. These could be new substances, which means their hazard profile may not yet be fully characterized. To avoid regrettable substitutions - thus ensuring the selected alternative is safer - expert opinion will be used to confirm the expected toxicological properties of safer alternative candidates based on in-vitro tests and international methodologies, such as QSAR, Read Across and Greenscreen®.

In addition to delivering on our sustainability objectives, we believe that this approach allows us to stay ahead of future regulatory changes and meet the increasing market demand for more sustainable materials.

More information on the product can be found on www.dsm.com/paint.

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Or find us on:

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