

Tübingen, July 2018

## Customer information on legal conditions | D4, D5 and D6 Siloxanes

Since June 27<sup>th</sup> European Chemicals Agency (ECHA) included following siloxanes on their EU REACH Candidate List for Substances of Very High Concern (SVHC)

- D4 (Octamethylcyclotetrasiloxane)
- D5 (Decamethylcyclopentasiloxane) and
- D6 (Dodecamethylcyclohexasiloxane)

SVHC is a term used in Europe under the EU REACH regulations to list substances that meet certain criteria. In case of D4, D5 and D6 EU has decided to include these substances due to existing or predicted environmental properties (PBT and/or vPvB properties).

- PBT is the criteria for persistent, accumulative and toxic at the same time
- vPvB means very persistent and very accumulative at the same time

Regarding D4 the above mentioned criteria have been met by analytical results, for D5 and D6 the European authorities assumed and predicted the same, since both are similar to D4 in chemistry and structure.

### Further information

Different studies document that silicones behave differently in the environment from what is predicted under EU REACH PBT and vPvB criteria, as supported by the scientific evidence and real-life data. It should be noted, after in-depth evaluation, countries outside of the EU – e.g. Canada and Australia – have not found reasons to impose any kind of restrictions on D4, D5 and D6<sup>1</sup>. The U.S. is also considering an evaluation of D4 and has worked collaboratively with industry to produce exposure data. Initial risk assessments completed have shown no significant risk to the environment. Therefore CHT has the opinion that the SVHC candidate listing of D4, D5 and D6 in Europe does not take into account the full body of scientific evidence or on-going regulatory activities.

Please note, that the SVHC listing of D4, D5 and D6 is only valid for the EU. An SVHC listing doesn't ban the use of silicone polymers, nor is it a ban or a

<sup>1</sup> Studies evaluating the impact of D4, D5 and D6 have recently been completed in Canada (<http://www.ec.gc.ca/...>) and Australia (<https://www.nicnas.gov.au/chemical-information/imap-assessment/...>). Each decided not to impose any restrictions on the use of these substances in commerce.

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restriction on the use of D4, D5 or D6. Moreover the SVHC listing does not change the classification of our CHT products.

Substances on the SVHC Candidate List may, but are not required to be, subject to authorization under EU REACH regulation in future. At this time there is no proposal to move D4, D5 or D6 to the REACH authorization list (Annex XIV). Should the EU decide to proceed with authorization, which is only one and therefore not a required outcome of an SVHC listing, the impact on our products would be negligible as REACH authorization does not apply to materials used as intermediates or monomers.

#### Supplier duties

Due to a SVHC listing companies may have information obligations under EU REACH regulations for substances, mixtures or articles containing D4, D5 or D6 at or above a concentration of 0.1% (w/w):

Chemical suppliers:

- Update safety data sheet (SDS) with SVHC information and distribute it
- Communication on safe use

CHT will update relevant EU SDS regarding the inclusion of D4, D5 and D6 in the SVHC Candidate List due to the PBT/vPvB designation without undue delay. Additionally we will provide you with necessary information upon request.

Suppliers of articles/ready-made goods:

- Labelling of articles containing at or above 0.1 % (w/w) SVHC
- Communication on safe use
- Responding to consumer requests within 45 days
- Notifying ECHA for articles produced or imported in quantities above one tonne per year, which contain 0.1 % (w/w) or above of SVHC

ECHA explains in more detail the obligations resulting from inclusion of SVHCs in the candidate list on its website:

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

#### Silicones with respect on sustainability and the environmental impact

The use of silicones, siloxanes and silanes generates energy savings and greenhouse-gas emission reductions that outweigh the impacts of production and end-of-life disposal by a factor of 9.

A study, commissioned by the GSC (Global Silicone Council) from the sustainable development research firm Denkstatt in Austria, in association with DEKRA, a German testing and Certification Company, assessed the greenhouse-gas emissions and emission reduction effects linked to the manufacturing, use and waste management of products based on silicon chemistry in Europe, North America and Japan. The study found that silicone

chemistry products in the three regions allow for net CO<sub>2</sub> emission reductions of about 52 million tons per year."

Environmental monitoring and testing are central to the commitment of the silicone industry to environmental protection.

An in-depth understanding of the chemical fate and effects of substances in the environment depends on high quality analysis and accurate test results that deliver consistent and comparable data. To ensure such information, the European Silicone Association CES has developed test methods to extract and detect silicones in samples collected from the environment. In most cases silicones are absent from samples.

CHT is using the same international accepted test methods and in the view of CHT silicones can be used safely, when used as intended.

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Note: This position statement provides general information and does not constitute a legal advice. Consult your regulatory affairs or legal department for guidance.

**Contact:**

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