



19 July 2019

Subject: REACH Substances of Very High Concern and Ashland

Dear Customer,

The following information is provided in response to your request for Ashland's position concerning the presence of Substances of Very High Concern (SVHCs) in the products we manufacture, market and sell to customers in the European Union (EU).

Ashland can confirm that:

- Procedures are in place to ensure compliance with the REACH obligations of a supplier (see appendix 1) for proactively and reactively informing our customers in situations where SVHCs are present in our products. Additionally, as a general rule, Ashland will provide you with the latest version of the Safety Data Sheet (SDS) upon product purchase. If an SVHC is present in any of the products you purchase from Ashland, the substance will be listed on the European SDS (at "any known concentration" equal to or greater than 0.1 %).
- The following SVHC substances are present in Ashland products (see appendix 2 for specific Commercial Unit products):
 - 1-methyl-2-pyrrolidone (June 2011)
 - cyclohexane-1,2-dicarboxylic anhydride and 4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated (December 2012)
 - octamethylcyclotetrasiloxane (D4), decamethylcyclopentasiloxane (D5), dodecamethylcyclohexasiloxane (D6), and dicyclohexyl phthalate (June 2018)
- Propylene oxide (methyl oxirane), which was added in December 2012, is not present in our products at levels of 0.1%, or higher. The propylene oxide in our products is bound (to polymers or other substances) and will not be released.
- Please see appendix 2 for an overview of the Ashland products involved. Where applicable, you will see these substances identified on the European SDS for the product. Although not legally required, Ashland is working on the reformulation of (some of) these products, where there is a benefit from reformulation to Ashland and our customers. In specific cases, you may be contacted to review the options.
- As additional SVHCs are placed on the candidate list, we will review the formulations of our product portfolio to phase out these substances from our products, where possible.

If you have questions regarding any REACH-related subject, please contact Ashland via your representative or send an e-mail to globalregulatorycustomerrequest@ashland.com

Kind regards,

Sandor Zuurendonk
Manager – REACH

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REACH will continue to apply in the United Kingdom until the United Kingdom exits the European Union. REACH or REACH-type requirements may continue to apply after the United Kingdom exits the EU, however this is unclear at the moment. Once the consequences of the exit become clearer, Ashland will decide on necessary steps to be taken.

Appendix 1

SVHC

SVHCs, also known as "Annex XIV substances," are clearly described in Article 57 of Regulation (EC) No 1907/2006 (the "REACH Regulation"). These substances are identified according to ECHA (European Chemicals Agency):

- **CMR** substances; Carcinogenic, Mutagenic or toxic to Reproduction, meeting the criteria for classification in category 1 or 2 in accordance with Directive 67/548/EEC,
- **PBT** substances; Persistent, Bioaccumulative and Toxic according to the criteria in Annex XIII of the REACH regulation, or
- **vPvB** substances; very Persistent and very Bioaccumulative according to the criteria in Annex XIII of the REACH Regulation, and/or
- Identified, on a case-by-case basis, from scientific evidence as causing probable serious effects to human health or the environment of an equivalent level of concern as those above (e.g., endocrine disrupters).

In July 2019, ECHA updated the candidate list of SVHCs, which now contains 201 substances. The list is incomplete and more substances may be added. Please use the following link to see the latest version of the candidate list:

<http://www.echa.europa.eu/web/guest/candidate-list-table>

These substances may become subject to Authorisation. As result the following obligations apply;

Obligations

ARTICLES

- **From 28 Oct., 2008**, EU and European Economic Area (EEA) suppliers of articles which contain substances on the Candidate List in a concentration above 0.1% (w/w) **must**
 - **provide sufficient information, available to them, to their customers and on request to consumers within 45 days of the receipt of this request.** This information must ensure safe use of the article and, as a minimum, include the name of the substance.
 - **notify the Agency**, according to article 7 (2), **if the substance is present in those articles** in quantities totaling over 1 tonne per producer or importer per year.

SUBSTANCES

- **From 28 Oct., 2008**, EU and EEA suppliers of a substance have to **provide a safety data sheet to their customers** when the substance is on the Candidate List.

PREPARATIONS

- **From 28 Oct., 2008**, EU and EEA suppliers of a preparation not classified as dangerous according to Directive 1999/45/EC have to **provide the recipients, at their request, with a safety data sheet** if the preparation contains at least one substance on the Candidate List and its individual concentration is at least 0.1% (w/w) for non-gaseous preparations and at least 0.2% by volume for gaseous preparations.

Ashland's products, in general, are preparations (mixtures of several substances).

Appendix 2

The tables below present an overview of those Ashland products currently on the European market, containing SVHCs. Although not legally required, we are working on the reformulation of (some of) these products, where reformulation would be valuable to both Ashland and our customers. In specific cases we will contact you to review the options.

* Under Article 56(3) use of substances in scientific research and development is exempt from Authorisation. According to the definition of REACH, scientific research and development means any scientific experimentation, analysis or chemical research carried out under **controlled conditions** in volume less than one tonne per year. On the basis of this, it is likely that the use of substances as test reagent or indicator **in laboratory settings** is exempt.

1-methyl-2-pyrrolidone (EC#212-828-1)	
Ashland Product Number	Product Name
830697, 830698, 830699	PHARMASOLVE
829929, 829933	M-PYROL
829841, 829844	MICROPURE EG
829848, 857893, 857894	MICROPURE ULTRA II
828306, 828307	GAFSOLVER TMP

4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated (EC# not specified)	
Ashland Product Number	Product Name
824784, 824785	PURETHANE CO-CL0029E WB LA

cyclohexane-1,2-dicarboxylic anhydride (EC#201-604-9)	
Ashland Product Number	Product Name
842346	PURERAD 3401263 LA
812559	PURERAD 52575E LOW MIGR LAM ADH
845211, 862056	PURERAD L7000E HB LAM ADH
845214, 910231	PURERAD L7070E PET LAM ADH
883053, 885291, 895777	PURERAD L7200E LM LAM ADH
906033, 906032	PURERAD L7211E UV LAM ADH
824468, 904986	PURERAD MAHP MONOMER

dodecamethylcyclohexasiloxane (D6) (EC#208-762-8)	
Ashland Product Number	Product Name
877124	CAPTIVATES GL21748
877126	CAPTIVATES GL21749
910490	CAPTIVATES GL21881
935346	CAPTIVATES GL21997
828965, 828966	ISP CAPTIVATES HC2825

decamethylcyclopentasiloxane (D5) (EC#208-764-9)	
Ashland Product Number	Product Name
358205	DREWPLUS S-4382
877124	CAPTIVATES GL21748
877126	CAPTIVATES GL21749
910490	CAPTIVATES GL21881
829570	LUBRASIL
935346	CAPTIVATES GL21997
828965, 828966	ISP CAPTIVATES HC2825
831698	SI-TEC CM 040
831713	SI-TEC GF 1000
831714	SI-TEC GF 3092

octamethylcyclotetrasiloxane (D4) (EC#209-136-7)	
Ashland Product Number	Product Name
722163	DREW 210-900
51357, 100799, 309880	DREWPLUS S-4386
576901, 576560	DREWPLUS S4374
587590, 587753	DREWPLUS S-4288
340674, 325835, 895847	DREW 210-862
320777, 353540, 320775	DREW 210-886
100544	DREWPLUS S-4480
50516, 67797	DREWPLUS TS-4481
358205	DREWPLUS S-4382
831713	SI-TEC GF 1000
831714	SI-TEC GF 3092
831708, 831709	SI-TEC DMC 6031

dicyclohexyl phthalate (EC#201-545-9)	
Ashland Product Number	Product Name
879635, 889243	PURESEAL 23519ES HEATSEAL