

SECTION 1. Identification of the Substance/Preparation and of the Company/Undertaking

1.1. Product identifier

Substance name: **Elkem Antifoam MD-14**

1.2. Relevant identified uses of the substance or mixture and uses advised against

Application: Defoamant
Uses advised against: None known

1.3. Details of the supplier of the safety data sheet

Address/Phone No.: **Elkem ASA, Silicon Products**
P.O. Box 334 Skøyen
N-0213 Oslo, Norway
Telephone: + 47 22 45 01 00
[https://www.elkem.com/silicon-products/
support.siliconproducts@elkem.com](https://www.elkem.com/silicon-products/support.siliconproducts@elkem.com)

Contact:

1.4. **Emergency telephone number:** USA: Poison Help (AAPCC): 1-800-222-1222 & PoisonHelp.org
United Kingdom: Contact your GP or NHS 111 on 111
(for 24 hour health advice).

National Poison Centre telephone: <https://poisoncentres.echa.europa.eu/home>

REACH and CLP helpdesk: <https://echa.europa.eu/support/helpdesks/>

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture.

Hazard classification in accordance with Regulation (EC) No 1272/2008 (CLP) and the UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS), 9th revision as amended:

Skin sensitizer	Category 1	H317: May cause an allergic skin reaction.
Carcinogenicity	Category 1B	H350: May cause cancer.

2.2. Label elements

Contains: reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2).

Hazard pictograms:



Signal word: Danger

Hazard statements:

H317: May cause an allergic skin reaction.

H350: May cause cancer

Precautionary statements:**Prevention:**

P201: Obtain special instructions before use.
 P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
 P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P302+P352: IF ON SKIN: Wash with plenty of soap and water.
 P308+P313: IF exposed or concerned: Get medical advice/attention.

Disposal:

P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

2.3. Other hazards

Physical Hazards: Material will burn if water evaporates from emulsion, and it is heated above its flash point.

Health hazards:

Inhalation: No specific symptoms noted.
Eye contact: No specific symptoms noted.
Skin contact: May cause an allergic skin reaction.
Ingestion: No specific symptoms noted.
Other health effects: May cause cancer.

Environmental hazards: No hazard identified as the maximum bioavailable concentration of Octamethylcyclotetrasiloxane (D4) is lower than the classification cut-off value (see Section 12 of this SDS).

Other hazards: This substance/mixture contains components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB).

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1 % or higher.

SECTION 3: Composition/Information on Ingredients**3.2. Mixtures.**

General information: Aqueous emulsion of Polyorganosiloxanes.

Chemical name	Concentration	Type	CAS-No.	EC-No.	REACH Reg. No.	Notes
reaction products of paraformaldehyde and 2- hydroxypropylamine (ratio 3:2)	0.1 - <1 %	Component	66204-44-2	266-235-8	Biocide	
Octamethylcyclotetra siloxane; [D4]	0.01 - <0.079 %	Impurities	556-67-2	209-136-7	Not relevant.	## PBT, vPvB

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

This substance has work place exposure limit(s).

This substance is listed as SVHC.

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

ED: Endocrine Disruptor

Classification:

Chemical name	Classification	Specific concentration limits / ATE / M-Factor:	Notes
reaction products of paraformaldehyde and 2- hydroxypropylamine (ratio 3:2)	Skin Sens. 1A H317; Acute Tox. 4 H302; Carc. 1B H350; Muta. 2 H341; Acute Tox. 3 H311; Skin Corr. 1B H314; STOT RE 2 H373; Eye Dam. 1 H318; Acute Tox. 4 H332; Aquatic Chronic 2 H411;	none.	Note 8, Note 9
Octamethylcyclotetra siloxane; [D4]	Flam. Liq. 3 H226; Repr. 2 H361f; Aquatic Chronic 1 H410	Aquatic Toxicity (Chronic): 10	

The full text for all H-statements is displayed in section 16.

SECTION 4: First Aid Measures

General information:

Move into fresh air and keep at rest. Take off contaminated clothing and wash it before reuse. Get medical attention immediately.

4.1 Description of first aid measures:

Inhalation:

Under normal conditions of intended use, this material is not expected to be an inhalation hazard. In case of inhalation: Move person into fresh air and keep at rest. Get medical attention if symptoms occur

Skin contact:

Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash skin with soap and water. Get medical attention immediately. Contaminated clothing to be placed in closed container until disposal or decontamination. Wash contaminated clothing before reuse.

Eye contact:

In the event of contact with the eyes, rinse thoroughly with clean water for at least 15 minutes. Get medical attention if symptoms occur.

Ingestion:

Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if symptoms occur

Personal Protection for First-aid Responders:

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). Refer to sections 5 and 8 for information on emergency procedures and protective equipment.

4.2 Most important symptoms and effects, both acute and delayed:

Any important symptoms and effects are described in Section 11 (Toxicological information) of this SDS.

4.3 Indication of any immediate medical attention and special treatment needed:

Notes to the physician:

No specific recommendations. Show this Safety Data Sheet to the attending physician

SECTION 5: Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing media:

Water spray, foam, dry powder or carbon dioxide.

Unsuitable extinguishing media:

Avoid water in straight hose stream; will scatter and spread fire.

5.2 Special hazards arising from the substance or mixture:

Material will burn if water evaporates from emulsion, and it is heated above its flash point. Thermal decomposition or combustion may liberate carbon oxides, silicon oxides and other toxic gases or vapors.

5.3 Advice for fire-fighters:

Special fire fighting procedures:

Use standard firefighting procedures and consider the hazards of other involved materials. Remove undamaged containers from fire area if it is safe to do so. Evacuate to a safe location and contact the emergency services. Water spray should be used to cool containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Special protective equipment for fire-fighters:

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment.

6.2 Environmental Precautions:

Do not discharge into drains, water courses or onto the ground. Collect in containers and seal securely. Use containment for a large spill.

6.3 Methods and material for containment and cleaning up:

Collect in marked containers and deliver to approved depot. Container must be kept tightly closed. Absorb with sand or other inert absorbent. To clean the floor and all objects contaminated by this material, use an appropriate solvent (see § 9). Flush area with plenty of water. Spills should be absorbed and collected for disposal by a permitted chemical waste disposal agency

6.4 Reference to other sections:

Caution: Contaminated surfaces may be slippery. For waste disposal, see Section 13 of the SDS.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:

Precautions:

Avoid inhalation of vapors/aerosols/dusts and contact with skin and eyes. Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. If ventilation is insufficient, suitable respiratory protection must be provided. See Section 8 of the SDS for Personal Protective Equipment. Provide eyewash station and safety shower and ensure that their locations are labelled conspicuously. Limit the quantities of product in the work area to those which are necessary for the work in hand. Handle in accordance with good industrial hygiene and safety practices. Handle and open container with care. Protect from contamination. Do not mix with incompatible materials. For further information, refer to section 10: "Stability and Reactivity". Take care to prevent spills, waste and minimize release to the environment. In case of spills, beware of slippery floors and surfaces.

Hygiene measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

7.2 Conditions for safe storage, including any incompatibilities:

Store in accordance with local/regional/national regulations. Avoid discharge into drains, water courses or onto the ground. Provide impermeable soil. Store in a dry place. Store in a well-ventilated place. Keep container tightly closed. Keep in properly labelled containers. Keep above the chemical's freezing point. Protect against physical damage and/or friction. Store away from incompatible materials. For further information, refer to section 10: "Stability and Reactivity".

Packaging frequently used at our sites: Steel drums coated with epoxy-resin

7.3 Specific end use(s):

No specific recommendations. See the technical data sheet on this product for further information.

SECTION 8: Exposure controls/personal protection

8.1. Control Parameters

Occupational Exposure Limits:

octamethylclotetrasiloxane; D4

Type	Exposure Limit Values	Source	Date	Remark
TWA	10 ppm 120 mg/m ³	WEEL		

Monitoring methods:

Ensure workers' exposure monitoring in accordance with national and European regulations in force, in particular Directives 98/24/EC and 2004/37/EC

8.2 Exposure controls:

Appropriate Engineering Controls:

Use engineering controls to reduce air contamination to permissible exposure level. The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Engineering controls are always preferable to personal protective equipment. Control measures to consider: Provide adequate ventilation. In case of inadequate ventilation: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.

Individual protection measures, such as personal protective equipment:

Avoid inhalation of vapors/aerosols/dusts and contact with skin and eyes. Personal protective equipment should be chosen according to applicable standards, adapted to the conditions of use of the product and in discussion with the supplier of the personal protective equipment.

Eye/face protection: Safety glasses with side shields.

Hand Protection:

This recommendation is valid only for the product named in this safety data sheet supplied by us, and only for the indicated intended use purposes.

In case this product will be mixed with other substances, you need to contact a supplier of CE approved protective gloves in order to determine the appropriate gloves.

Prolonged or repeated contact:

Material: Nitrile

Glove thickness: 1.25 mm

Guideline: EN374-3

Additional Information: Gloves commonly used in Elkem's facilities.

Short contact:

Material: Nitrile / Neoprene

Glove thickness: 0.198 mm

Guideline: EN374-3

Additional Information: Gloves commonly used in Elkem's labs.

Skin and Body Protection:

Wear appropriate clothing to prevent any possibility of skin contact. Isolate contaminated clothing and wash before reuse. In case of splashes: Wear apron or special protective clothing.

Respiratory Protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use the following CE approved air-purifying respirator: Breathing apparatus with combined filter type ABEK. Wear respiratory protection with combination filter (dust and gas filter) during operations leading to the formation of dust/aerosols.

Environmental Controls:

See sections 7 and 13 of the Safety Data Sheet.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance:

Physical state:

Form:	Liquid
Color:	Slightly viscous.
Geur:	Milky white
Odor:	Faint
pH:	No data available.
Melting point/freezing point:	7 (100 %) Product as is.
	≥ 0 °C

Boiling point:	100 °C
Flash point:	> 100 °C / > 212 °F Aqueous emulsion
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Flammability Limit - Upper (%):	No data available.
Flammability Limit - Lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density (air=1):	No data available
Density:	Approx. 0.99 kg/dm ³ (20 °C)
Solubility(ies):	
Solubility in Water:	Dispersible
Solubility (other):	Common organic solvents: Insoluble
Partition coefficient (n-octanol/water):	No data available.
Self-Ignition Temperature:	No data available.
Decomposition Temperature:	No data available.
Kinematic viscosity:	Approx. 100 mm ² /s (25 °C)

9.2 Other information:

Dynamic viscosity:	Approximate 100 mPa.s (25 °C)
Oxidizing properties:	Not considered as oxidizing (evaluation by structure-activity relationship).

SECTION 10: Stability and reactivity

10.1 Reactivity:

No other information noted.

10.2 Chemical Stability:

Stable.

10.3 Possibility of hazardous reactions:

Will not occur.

10.4 Conditions to avoid:

No other information noted.

10.5 Incompatible Materials:

Strong oxidizing agents.

10.6 Hazardous Decomposition Products:

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.
Amorphous silica.

SECTION 11: Toxicological information

Information on likely routes of exposure:

Inhalation: No data available.

Ingestion:

No data available.

Skin contact:

No data available.

Eye contact:

No data available.

11.1 Information on toxicological effects:

Acute toxicity:

Oral: Not classified for acute toxicity based on available data.
Dermal: Not classified for acute toxicity based on available data.
Inhalation: Not classified for acute toxicity based on available data.

Repeated dose toxicity:

Based on our knowledge of the composition information:

REACTION PRODUCTS OF PARAFORMALDEHYDE AND 2-HYDROXYPROPYLAMINE (RATIO 3:2) (66204-44-2):

NOAEL: 20 mg/kg; (Rat; Female, Male; Oral); Method: OECD 408; Gavage Subchronic exposure.

OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):

NOAEL: 1.82 mg/L; (Rat; Female, Male; Inhalation - vapour); Method: Similar to OECD 453; Chronic exposure.
NOAEL: 960 mg/kg; (Rabbit; Female, Male; Dermal); Method: Similar to OECD 410; Subacute exposure

Skin Corrosion/Irritation:

Based on our knowledge of the composition information:

REACTION PRODUCTS OF PARAFORMALDEHYDE AND 2-HYDROXYPROPYLAMINE (RATIO 3:2) (66204-44-2):

Causes severe skin burns and eye damage. (Rabbit); Method: OECD 404

Serious Eye Damage/Eye Irritation:

Based on our knowledge of the composition information:

REACTION PRODUCTS OF PARAFORMALDEHYDE AND 2-HYDROXYPROPYLAMINE (RATIO 3:2) (66204-44-2):

Causes serious eye damage. (Rabbit); Method: OECD 405

OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):

Not irritating (Rabbit); Method: OECD 405

Respiratory or Skin Sensitization:

Based on our knowledge of the composition information: May cause an allergic skin reaction.

REACTION PRODUCTS OF PARAFORMALDEHYDE AND 2-HYDROXYPROPYLAMINE (RATIO 3:2) (66204-44-2):

Skin sensitizer: Skin sensitizer (Guinea Pig); Method: OECD 406

OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):

Skin sensitization: Not a skin sensitizer. (Guinea Pig); Method: OECD 406

Germ Cell Mutagenicity:

In vitro: Based on our knowledge of the composition information:

REACTION PRODUCTS OF PARAFORMALDEHYDE AND 2-HYDROXYPROPYLAMINE (RATIO 3:2) (66204-44-2):

Bacterial reverse mutation test: Mutagen., with and without metabolic activation (Salmonella typhimurium and Escherichia coli); Method: OECD 471

In vitro gene mutations test on mammalian cells: Mutagen., with and without metabolic activation (Mouse lymphoma cells); Method: OECD 476

In vitro mammalian chromosomal aberration test: Clastogenic effect., with and without metabolic activation (Chinese hamster lung cells); Method: OECD 473

OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):

Bacterial reverse mutation test: No mutagenic effect. (Salmonella typhimurium; with and without metabolic activation); Method: OECD 471

In vitro gene mutations test on mammalian cells: No mutagenic effect. (Mouse lymphoma cells; with and without metabolic activation); Method: Similar to OECD 476

In vitro mammalian chromosomal aberration test: No clastogenic effect. (Chinese hamster ovary cells; with and without metabolic activation); Method: Similar to OECD 473

In vivo: Based on our knowledge of the composition information:

REACTION PRODUCTS OF PARAFORMALDEHYDE AND 2-HYDROXYPROPYLAMINE (RATIO 3:2) (66204-44-2):

Mammalian bone marrow chromosomal aberration test: negative (Mouse; Female, Male; Oral); Method: OECD 475

Mammalian erythrocyte micronucleus test: negative (Mouse; Female, Male; Oral); Method: OECD 474

OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):

Mammalian bone marrow chromosomal aberration test: negative (Rat; Female, Male; Inhalation); Method: Similar to OECD 475

Rodent dominant Lethal test: negative (Rat; Female, Male; Gavage (Oral)); Method: Similar to OECD 478

Carcinogenicity:

Based on our knowledge of the composition information: May cause cancer.

OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):

Not classified

No effects expected. NOAEC: ≥ 8.492 mg/L (Rat; Female, Male; Inhalation – vapor); Method: Similar to OECD 453; Chronic exposure.

Reproductive toxicity:

Fertility: Based on our knowledge of the composition information:

REACTION PRODUCTS OF PARAFORMALDEHYDE AND 2-HYDROXYPROPYLAMINE (RATIO 3:2) (66204-44-2):

Fertility study 1 generation: NOAEL (parent): 15 mg/kg NOAEL (F1): NOAEL (F2): (Rat; Female, Male; Ingestion); Method: OECD 415

OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):

Suspected of damaging fertility.

Fertility study 2 generations: NOAEL (parent): 3.64 mg/L; NOAEL (F1): 3.64 mg/L; NOAEL (F2): None. (Rat; Female, Male; Inhalation); Method: Similar to OECD 416; Effects on fertility

Teratogenicity: Based on our knowledge of the composition information:

REACTION PRODUCTS OF PARAFORMALDEHYDE AND 2-HYDROXYPROPYLAMINE (RATIO 3:2) (66204-44-2):

NOAEL (terato): ≥ 90 mg/kg; NOAEL (mater): ≥ 90 mg/kg (Rabbit; female); Method: OECD 414

OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):

NOAEL (terato): ≥ 8.492 mg/L; NOAEL (mater): 3.64 mg/L (Rat; Inhalation - vapor); Method: Similar to OECD 414; The product is not considered to be toxic for development. NOAEL (terato): ≥ 6.066 mg/L; NOAEL (mater): 3.64 mg/L (Rabbit; Inhalation - vapor); Method: Similar to OECD 414; The product is not considered to be toxic for development.

Specific Target Organ Toxicity - Single Exposure:

Based on our knowledge of the composition information:

REACTION PRODUCTS OF PARAFORMALDEHYDE AND 2-HYDROXYPROPYLAMINE (RATIO 3:2) (66204-44-2):

Based on available data, the classification criteria are not met.

OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2): Based

on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Repeated Exposure:

Based on our knowledge of the composition information:

REACTION PRODUCTS OF PARAFORMALDEHYDE AND 2-HYDROXYPROPYLAMINE (RATIO 3:2) (66204-44-2):

May cause damage to organs through prolonged or repeated exposure.

OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):

Based on available data, the classification criteria are not met.

Aspiration Hazard:

Based on our knowledge of the composition information:

OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties: Available data for the product have been considered against the criteria laid down in Regulations ((EC) No 1907/2006, (EU) 2017/2100, (EU) 2018/605) and found not to apply.

11.2.2. Other information

None

SECTION 12: Ecological Information

General information

The maximum concentration of Octamethylcyclotetrasiloxane (D4) leachable from the product is below the established no-effect threshold (<0.0079 mg/L) for aquatic organisms.

12.1 Toxicity:

Acute toxicity:

Fish: Based on our knowledge of the composition information:

REACTION PRODUCTS OF PARAFORMALDEHYDE AND 2-HYDROXYPROPYLAMINE (RATIO 3:2) (66204-44-2):

LC 50 (Danio rerio; 96 h): 71 mg/L; Method: OECD 203

OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):

LC 50 (Oncorhynchus mykiss; 96 h; Flow through): > 0.022 mg/L; Method: According to a standardised method.

Aquatic Invertebrates: Based on our knowledge of the composition information:

REACTION PRODUCTS OF PARAFORMALDEHYDE AND 2-HYDROXYPROPYLAMINE (RATIO 3:2) (66204-44-2):

EC 50 (Water flea (Daphnia magna); 48 h): 29 mg/L; Method: OECD 202

OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):

EC 50 (Water flea (Daphnia magna); 48 h; Flow through): > 0.015 mg/L; Method: According to a standardised method.

Aquatic plants: Based on our knowledge of the composition information

REACTION PRODUCTS OF PARAFORMALDEHYDE AND 2-HYDROXYPROPYLAMINE (RATIO 3:2) (66204-44-2):

ErC50 (Green algae (Scenedesmus subspicatus); 72 h): 5.7 mg/L; Method: OECD 201

ErC10 (Green algae (Scenedesmus subspicatus); 72 h): 2.1 mg/L; Method: OECD 201

NOEC (Green algae (Scenedesmus subspicatus); 72 h): 2.2 mg/L; Method: OECD 201

OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):

ErC50 (Algae (Pseudokirchneriella subcapitata); 96 h): > 0.022 mg/L; Method: According to a standardised method.

ErC10 (Algae (Pseudokirchneriella subcapitata); 96 h): ≥ 0.022 mg/L; Method: According to a standardised method.

Toxicity to microorganisms: Based on our knowledge of the composition information:

OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):

EC 50 (3 h): > 10 000 mg/L

Chronic Toxicity:

Fish: Based on our knowledge of the composition information:

OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):

NOEC (Oncorhynchus mykiss; 93 d; Flow through): ≥ 0.0044 mg/L; Method: According to a standardised method.

Aquatic Invertebrates: Based on our knowledge of the composition information:

REACTION PRODUCTS OF PARAFORMALDEHYDE AND 2-HYDROXYPROPYLAMINE (RATIO 3:2) (66204-44-2):

EC10 (Water flea (Daphnia magna); 21 d): 1.1 mg/L; Method: OECD 211

NOEC (Water flea (Daphnia magna); 21 d): 1.3 mg/L; Method: OECD 211

OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):

NOEC (Water flea (Daphnia magna); 21 d): 0.0079 mg/L; Method: EPA OTS 797.1330 (Daphnid Chronic Toxicity Test); CLH report / RAC Opinion

NOEC (Water flea (Daphnia magna); 21 d; Flow through): ≥ 0.015 mg/L; Method: According to a standardised method.

12.2 Persistence and degradability:

Biodegradation:

Biodegradation: Based on our knowledge of the composition information:

REACTION PRODUCTS OF PARAFORMALDEHYDE AND 2-HYDROXYPROPYLAMINE (RATIO 3:2) (66204-44-2):

89,8 % (activated sludge (adaptation not specified); 29 d); Method: OECD 301 B; The substance fulfills the criteria for ultimate aerobic biodegradability and ready biodegradability.

OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):

3,7 % (activated sludge and sewage, soil; 28 d); Method: OECD 310; The product is not considered to be readily biodegradable.

BOD/COD Ratio: No data available

12.3 Bioaccumulative potential:

Bioconcentration Factor (BCF): Based on our knowledge of the composition information:

REACTION PRODUCTS OF PARAFORMALDEHYDE AND 2-HYDROXYPROPYLAMINE (RATIO 3:2) (66204-44-2):

Bioconcentration Factor (BCF): 1,41 (Fish); Method: QSAR; The product is not considered to have a bioaccumulative potential.

OCTAMETHYLCYCLOTETRASILOXANE; [D4] (556-67-2):

Bioconcentration Factor (BCF): 14 900 (Fathead Minnow); Method: OECD 305; Not bioaccumulable based on the depuration rate constant.

Partition coefficient (n-octanol/water): Based on our knowledge of the composition information:

REACTION PRODUCTS OF PARAFORMALDEHYDE AND 2-HYDROXYPROPYLAMINE (RATIO 3:2) (66204-44-2):

Log Kow: -0.043

OCTAMETHYLCYCLOTETRASILOXANE; [D47(556-67-2):

Log Kow: 5.10

Log Kow: 6.49 (25 °C); Method: OECD 123

12.4 Mobility in soil:

No data available.

12.5 Results of PBT and vPvB assessment:

Based on our knowledge of the composition information:

OCTAMETHYLCYCLOTETRASILOXANE; ID41 (556-67-2):

Meets PBT (persistent/bioaccumulative/toxic) criteria. (REACH (1907/2006) Ax XIII)

Meets vPvB criteria (REACH (1907/2006) Ax XIII).

12.6. Endocrine disrupting properties

Endocrine disrupting properties: Available data for the product have been considered against the criteria laid down in Regulations ((EC) No 1907/2006, (EU) 2017/2100, (EU) 2018/605) and found not to apply

12.7 Other adverse effects

Not relevant.

SECTION 13: Disposal considerations

13.1 Waste treatment methods:

The user's attention is drawn to the possible existence of local regulations regarding disposal.

Disposal methods:

Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Contaminated Packaging: Contaminated packages should be as empty as possible. Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

SECTION 14: Transport information

This material is not subject to transport regulations.

Transport in bulk according to Annex II of MARPOL and the IBC Code: Not applicable.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

EU Regulations:

Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex I, Controlled Substances:

None present or none present in regulated quantities.

Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex II, New Substances: None

present or none present in regulated quantities.

EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), as amended: None

present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended: None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended: None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended: None present or none present in regulated quantities.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended: None present or none present in regulated quantities.

EU. Directive 2010/75/EU on Industrial Emissions (IPPC), Annex II, L 334/17:

Chemical name	CAS-No.
octamethylcyclotetrasiloxane; [D4]	556-67-2

EU. REACH Annex XIV, Substances Subject to Authorization: None present, or none present in regulated quantities.

EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC):

Chemical name	CAS-No.	Concentration	Additional Information:
octamethylcyclotetrasiloxane; [D4]	556-67-2	0.01 - 0.079 %	Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB)

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use:

The packaging shall be visibly, legibly and indelibly marked as follows: Restricted to professional users.

Chemical name	CAS-No.	Entry No:	Concentration:
octamethylcyclotetrasiloxane; [D4]	556-67-2	70	0.01 - 0.079 %

Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work:

Chemical name	CAS-No.	Concentration
reaction products of paraformaldehyde and 2- hydroxypropylamine (ratio 3:2)	66204-44-2	0.1 - 1.0 %
octamethylcyclotetrasiloxane; [D4]	556-67-2	0.01 - 0.079 %

EU. Regulation No. 166/2006 PRTR (Pollutant Release and Transfer Registry), Annex II: Pollutants:

None present or none present in regulated quantities.

EU. Directive 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances, Annex I:

Not applicable

15.2 Chemical safety assessment:

No Chemical Safety Assessment has been carried out.

Inventory Status

Australia Industrial Chem. Act (AIC):	On or in compliance with the inventory.
Canada DSL Inventory List:	On or in compliance with the inventory.
China Inv. Existing Chemical:	On or in compliance with the inventory.
Substances: Japan (ENCS) List:	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory.
New Zealand Inventory of Chemicals:	On or in compliance with the inventory.
Philippines PICCS:	On or in compliance with the inventory.
Taiwan Chemical Substance:	On or in compliance with the inventory.
Inventory: US TSCA Inventory:	On or in compliance with the inventory.
EINECS, ELINCS or NLP:	On or in compliance with the inventory.

SECTION 16: Other information

Abbreviations and acronyms:

CLP:	Regulation No. 1272/2008.
PBT:	persistent, bioaccumulative and toxic substance.
vPvB:	very persistent and very bioaccumulative substance.
NOAEL:	No Observable Adverse Effect Level
LOAEL:	Lowest Observable Adverse Effect Level
ED:	Endocrine Disruptor
SVHC:	Listed on the Candidate List of substances of very high concern (SVHC)

Notes:

reaction products of paraformaldehyde and 2-hydroxypropylamine (ratio 3:2)	Note 8	The classification as a carcinogen need not apply if it can be shown that the maximum theoretical concentration of releasable formaldehyde, irrespective of the source, in the mixture as placed on the market is less than 0.1 %.
	Note 9	The classification as a mutagen need not apply if it can be shown that the maximum theoretical concentration of releasable formaldehyde, irrespective of the source, in the mixture as placed on the market is less than 1 %.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) No 1272/2008 as amended.	Classification procedure
Skin sensitizer ; Category 1 ; H317	On basis of test data
Carcinogenicity ; Category 1B ; H350	On basis of test data

Wording of the H-statements in section 2 and 3:

EUH071	Corrosive to the respiratory tract.
H226	Flammable liquid and vapor.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H341	Suspected of causing genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H350	May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H361f	Suspected of damaging fertility.
H373	May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Disclaimer:

The information given is based on data available for the material, the components of the material, and similar materials. The information is believed to be correct. It is given in good faith. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

REV 01: company info updated (section 1)