SAFETY DATA SHEET

REPLISET-F1, -F5, -T1, -T3, -GF1, -GT1 - Part B

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier

Product name : REPLISET-F1, -F5, -T1, -T3, -GF1, -GT1 - Part B

Cat. No. : 40900046, 40900047, 40900048, 40900049, 40900050, 40900051, 40900052, 40900053, 40900068, 40900069, 40900070, 40900071, 40900076, 40900077, 40900078, 40900079

Container size : 50 ml

Product type : Liquid.

Other means of identification : Not available.

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

Product use : Replication system for materialographic surfaces.

Area of application : Professional applications.

Uses advised against
None identified.

1.3 Details of the supplier of the safety data sheet

Struers ApS
Pederstrupvej 84
DK-2750 Ballerup

Telephone: +45 44 600 800

e-mail address of person responsible for this SDS : sdsquestions@struers.dk

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : 2122 4071

Supplier

Telephone number : +45 44 600 800 (Only during office hours)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Aquatic Chronic 3, H412
PBT, EUH440
vPvB, EUH441

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

SECTION 2: Hazards identification

Ingredients of unknown toxicity : 9.9 percent of the mixture consists of component(s) of unknown acute oral toxicity
9.9 percent of the mixture consists of component(s) of unknown acute dermal toxicity
9.9 percent of the mixture consists of component(s) of unknown acute inhalation toxicity

Ingredients of unknown ecotoxicity : Contains 9.9% of components with unknown hazards to the aquatic environment

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Signal word : No signal word.
Derogations from labelling requirements for special cases: Article 23/Annex I (1.3.4.1.)
The active ingredients present in this product are encapsulated by the plastic matrix and are therefore not likely to be released.

Hazard statements : Not applicable.
Derogations from labelling requirements for special cases: Article 23/Annex I (1.3.4.1.)
The active ingredients present in this product are encapsulated by the plastic matrix and are therefore not likely to be released.

Precautionary statements

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Supplemental label elements : Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.
The following paragraph from the annex of Regulation (EU) 2024/1328 - Entry 70 applies: 6. By way of derogation, paragraph 1, point (c), shall not apply to the placing on the market of mixtures that contain D4, D5 or D6 as residues from silicone polymers, under the following conditions: (a) D4, D5 or D6 in a concentration equal to or less than 1 % by weight of the respective substance in the mixture, for use in adhesion, sealing, gluing and casting.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture contains substances that are assessed to be a PBT or a vPvB, refer to Section 3.2.

SECTION 2: Hazards identification

Product meets the criteria for endocrine disrupting properties according to Regulation (EC) No. 1907/2006. : No.

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	EC: 272-697-1 CAS: 68909-20-6 Index: 014-052-00-7	≥5 - <10	STOT RE 2, H373 (lungs) (inhalation) EUH066	-	[1]
Platinum, 1,3-diethenyl-1,1,3,3-tetramethyldisiloxane complexes	REACH #: 01-2120224513-67 EC: 701-315-2	≥1 - <3	Flam. Liq. 2, H225 Repr. 2, H361d	-	[1]
1,1,3,3-tetramethyl-1,3-divinyldisiloxane	REACH #: 01-2119970223-42 EC: 220-099-6 CAS: 2627-95-4	≥0.1 - <1	Flam. Liq. 2, H225 Repr. 2, H361 (oral)	-	[1]
dodecamethylcyclohexasiloxane	REACH #: 01-2119517435-42 EC: 208-762-8 CAS: 540-97-6	≥0.1 - <1	PBT, EUH440 vPvB, EUH441	-	[1] [2] [3]
decamethylcyclopentasiloxane	REACH #: 01-2119511367-43 EC: 208-764-9 CAS: 541-02-6	≥0.1 - <1	PBT, EUH440 vPvB, EUH441	-	[1] [2] [3]
2,4,6,8-tetramethyl-2,4,6,8-tetravinylcyclotetrasiloxane	REACH #: 01-2119989491-24 EC: 219-863-1 CAS: 2554-06-5	≥0.1 - <0.3	Repr. 1B, H360Fd	-	[1]
octamethylcyclotetrasiloxane	REACH #: 01-2119529238-36 EC: 209-136-7 CAS: 556-67-2 Index: 014-018-00-1	≥0.01 - <0.1	Flam. Liq. 3, H226 Repr. 2, H361f Aquatic Chronic 1, H410 PBT, EUH440 vPvB, EUH441 **See Section 16 for the full text of the H statements declared above.**	M [Chronic] = 10	[1] [2] [3]

SECTION 3: Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
[3] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

Occupational exposure limits, if available, are listed in Section 8.

Particle characteristics

Product/ingredient name	Size distribution	Shape and aspect ratio	Crystallinity	Surface functionalisation/ treatment	Specific surface area	Additional information
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	d90 1 to 100 nm	Not available	Not available	Not available	Not available	Not available

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : In case of fire, use water spray (fog), foam, dry chemical or CO_2.

Unsuitable extinguishing media : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. This material strongly accumulates in the environment and living organisms including in humans. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
metal oxide/oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

6.3 Methods and material for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dispose of via a licensed waste disposal contractor. Absorb spill with inert material (e.g. dry sand or earth) and place in a chemical waste container.

SECTION 6: Accidental release measures

Large spill : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

Biological exposure indices

No exposure indices known.

SECTION 8: Exposure controls/personal protection

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Result	
1,1,3,3-tetramethyl-1,3-divinyldisiloxane	**DNEL - General population - Long term - Oral** 0.33 mg/kg bw/day	Effects: Systemic
	DNEL - Workers - Long term - Dermal 0.65 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Long term - Inhalation 1.3 mg/m³	Effects: Systemic
	DNEL - Workers - Long term - Inhalation 4.6 mg/m³	Effects: Systemic
dodecamethylcyclohexasiloxane	**DNEL - General population - Long term - Inhalation** 0.3 mg/m³	Effects: Local
	DNEL - Workers - Long term - Inhalation 1.22 mg/m³	Effects: Local
	DNEL - General population - Short term - Inhalation 1.5 mg/m³	Effects: Local
	DNEL - Workers - Short term - Inhalation 6.1 mg/m³	Effects: Local
	DNEL - Workers - Long term - Inhalation 11 mg/m³	Effects: Systemic
decamethylcyclopentasiloxane	**DNEL - General population - Long term - Inhalation** 4.3 mg/m³	Effects: Local
	DNEL - General population - Long term - Oral 5 mg/kg bw/day	Effects: Systemic

SECTION 8: Exposure controls/personal protection

	DNEL - General population - Long term - Inhalation 17.3 mg/m³	Effects: Systemic
	DNEL - Workers - Long term - Inhalation 24.2 mg/m³	Effects: Local
	DNEL - Workers - Long term - Inhalation 97.3 mg/m³	Effects: Systemic
2,4,6,8-tetramethyl-2,4,6,8-tetravinylcyclotetrasiloxane	**DNEL - General population - Long term - Oral** 0.075 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Long term - Inhalation 0.26 mg/m³	Effects: Systemic
	DNEL - Workers - Long term - Inhalation 1.06 mg/m³	Effects: Systemic
	DNEL - General population - Long term - Dermal 7.8 mg/kg bw/day	Effects: Systemic
	DNEL - Workers - Long term - Dermal 15.6 mg/kg bw/day	Effects: Systemic
octamethylcyclotetrasiloxane	**DNEL - General population - Long term - Oral** 3.7 mg/kg bw/day	Effects: Systemic
	DNEL - General population - Long term - Inhalation 13 mg/m³	Effects: Local
	DNEL - General population - Long term - Inhalation 13 mg/m³	Effects: Systemic
	DNEL - Workers - Long term - Inhalation 73 mg/m³	Effects: Local
	DNEL - Workers - Long term - Inhalation 73 mg/m³	Effects: Systemic

PNECs

Product/ingredient name	Result

SECTION 8: Exposure controls/personal protection

dodecamethylcyclohexasiloxane	**Sewage Treatment Plant** 1 mg/l **Fresh water sediment** 13 mg/kg **Marine water sediment** 1.3 mg/kg
octamethylcyclotetrasiloxane	**Fresh water** 1.5 µg/l **Marine water** 0.15 µg/l **Sewage Treatment Plant** 10 mg/l **Fresh water sediment** 3 mg/kg **Marine water sediment** 0.3 mg/kg **Soil** 0.54 mg/kg

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Recommended: Nitrile gloves. (thickness: 1.25 mm), Neoprene gloves. (thickness: 0.198 mm). It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers.

SECTION 8: Exposure controls/personal protection

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid. [Viscous.]

Colour : Translucent.

Odour : Slight.

Odour threshold : Not available.

Melting point/freezing point : Not available.

Boiling point or initial boiling point and boiling range : Not available.

Flammability : Not considered to be flammable .

Lower and upper explosion limit : Not available.

Flash point : Closed cup: >150°C [Afnor T 60103]

Auto-ignition temperature : 400°C

Decomposition temperature : >200°C

pH : Not applicable.

Viscosity : Dynamic (room temperature): Not available.
Kinematic (room temperature): 18000 mm^2/s
Kinematic (40°C): Not available.

Solubility :

Media	Result
water	Not soluble

Solubility in water : Not available.

Partition coefficient n-octanol/water (log Pow) : Not applicable.

Vapour pressure : Not available.

Relative density : 1.12 [at 20°C]

Relative vapour density : Not available.

Particle characteristics

SECTION 9: Physical and chemical properties

Median particle size : Not applicable.

Refer to section 3 for further detail on nanoform particle characterisation.

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Explosive properties : Not available.

Oxidising properties : Not available.

9.2.2 Other safety characteristics

Miscible with water : No.

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Hazardous reactions or instability may occur under certain conditions of storage or use.
Hazardous polymerization may occur under certain conditions of storage or use.
Product may release hydrogen gas – increased storage temperatures will accelerate this process. (<4 l/kg - Product).

10.4 Conditions to avoid : Avoid high temperatures. Keep away from open flames.

10.5 Incompatible materials : Reactive or incompatible with the following materials: oxidising materials and alkalis.

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product/ingredient name	Result	
1,1,3,3-tetramethyl-1,3-divinyldisiloxane	**Rat - Oral - LD50** >10 g/kg	Toxic effects: Olfaction - Other changes Behavioral - Somnolence (general depressed activity) Other - Hair
dodecamethylcyclohexasiloxane	**Rat - Male, Female - Dermal - LD50** >2000 mg/kg	OECD 402 [Acute Dermal Toxicity]
	Rat - Oral - LD50 >50 g/kg	Toxic effects: Behavioral - Somnolence (general depressed activity) Lung, Thorax, or Respiration - Respiratory stimulation Lung, Thorax, or Respiration - Other changes

SECTION 11: Toxicological information

decamethylcyclopentasiloxane	**Rat - Oral - LD50** >24134 mg/kg	
	Rabbit - Male, Female - Dermal - LD50 >2000 mg/kg	OECD 402 [Acute Dermal Toxicity]
	Rat - Male, Female - Inhalation - LC50 Dusts and mists 8.67 mg/l [4 hours]	OECD 403 [Acute Inhalation Toxicity]
2,4,6,8-tetramethyl-2,4,6,8-tetravinylcyclotetrasiloxane	**Rat - Oral - LD50** >15 g/kg	
	Rabbit - Male, Female - Dermal - LD50 >2000 mg/kg	OECD 402 [Acute Dermal Toxicity]
octamethylcyclotetrasiloxane	**Rat - Inhalation - LC50 Vapour** >36 mg/l [4 hours]	

Conclusion/Summary [Product] : Not available.

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
decamethylcyclopentasiloxane	N/A	N/A	N/A	N/A	8.67

Skin corrosion/irritation

Product/ingredient name	Result	
1,1,3,3-tetramethyl-1,3-divinyldisiloxane	**Rabbit - Skin - Not irritant**	OECD 404 [Acute Dermal Irritation/Corrosion]
dodecamethylcyclohexasiloxane	**Rabbit - Skin - Not irritant**	OECD 404 [Acute Dermal Irritation/Corrosion]
decamethylcyclopentasiloxane	**Rabbit - Skin - Mild irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 500 mg	
2,4,6,8-tetramethyl-2,4,6,8-tetravinylcyclotetrasiloxane	**Rabbit - Skin - Not irritant** Amount/concentration applied: similar material	OECD 404 [Acute Dermal Irritation/Corrosion]
octamethylcyclotetrasiloxane	**Rabbit - Skin - Mild irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 500 mg	

Conclusion/Summary [Product] : Not available.

SECTION 11: Toxicological information

Serious eye damage/eye irritation

Product/ingredient name	Result	
1,1,3,3-tetramethyl-1,3-divinyldisiloxane	**Rabbit - Eyes - Not irritant** Amount/concentration applied: similar material	OECD 405 [Acute Eye Irritation/ Corrosion]
dodecamethylcyclohexasiloxane	**Rabbit - Eyes - Not irritant**	OECD 405 [Acute Eye Irritation/ Corrosion]
2,4,6,8-tetramethyl-2,4,6,8-tetravinylcyclotetrasiloxane	**Rabbit - Eyes - Not irritant** Amount/concentration applied: similar material	OECD 405 [Acute Eye Irritation/ Corrosion]

Conclusion/Summary [Product] : Not available.

Respiratory corrosion/irritation

Conclusion/Summary [Product] : Not available.

Respiratory or skin sensitization

Product/ingredient name	Result	
1,1,3,3-tetramethyl-1,3-divinyldisiloxane	**Guinea pig - skin** Result: Not sensitizing	OECD 406 [Skin Sensitization]
dodecamethylcyclohexasiloxane	**Guinea pig - skin** Result: Not sensitizing	OECD 406 [Skin Sensitization]
decamethylcyclopentasiloxane	**Mouse - skin** Result: Not sensitizing	OECD 429 [Skin Sensitization: Local Lymph Node Assay]
2,4,6,8-tetramethyl-2,4,6,8-tetravinylcyclotetrasiloxane	**Guinea pig - skin** Result: Not sensitizing	
octamethylcyclotetrasiloxane	**Guinea pig - skin** Result: Not sensitizing	OECD 406 [Skin Sensitization]

Skin

Conclusion/Summary [Product] : Not available.

Respiratory

Conclusion/Summary [Product] : Not available.

Germ cell mutagenicity

Product/ingredient name	Result

SECTION 11: Toxicological information

1,1,3,3-tetramethyl-1,3-divinyldisiloxane	**In vitro - Bacteria** Result: Negative	OECD 471 [Bacterial Reverse Mutation Test]
	In vivo - Mammalian-Animal Result: Negative	OECD 476 [In vitro Mammalian Cell Gene Mutation Test]
dodecamethylcyclohexasiloxane	**In vitro - Bacteria** Result: Negative	OECD 471 [Bacterial Reverse Mutation Test]
	In vitro - Mammalian-Animal Result: Negative	OECD 476 [In vitro Mammalian Cell Gene Mutation Test]
	In vivo - Mammalian-Animal Result: Negative	OECD 474 [Mammalian Erythrocyte Micronucleus Test]
2,4,6,8-tetramethyl-2,4,6,8-tetravinylcyclotetrasiloxane	**In vitro - Bacteria** Result: Negative	OECD 471 [Bacterial Reverse Mutation Test]
	In vitro - Mammalian-Animal Result: Positive	Metabolic activation: Metabolic activation OECD 476 [In vitro Mammalian Cell Gene Mutation Test]
	In vitro - Mammalian-Animal Result: Negative	OECD 476 [In vitro Mammalian Cell Gene Mutation Test]
	In vivo - Mammalian-Animal Result: Negative	OECD 474 [Mammalian Erythrocyte Micronucleus Test]
octamethylcyclotetrasiloxane	**In vitro - Bacteria** Result: Negative	OECD 471 [Bacterial Reverse Mutation Test]
	In vitro - Mammalian-Animal Result: Negative	OECD 473 [In vitro Mammalian Chromosomal Aberration Test]
	In vivo - Mammalian-Animal Result: Negative	OECD 475 [Mammalian Bone Marrow Chromosomal Aberration Test]
	In vivo - Mammalian-Animal Result: Negative	OECD 478 [Genetic Toxicology: Rodent Dominant Lethal Test]
	In vitro - Mammalian-Animal Result: Negative	OECD 476 [In vitro Mammalian Cell Gene Mutation Test]

Conclusion/Summary [Product] : Not available.

Carcinogenicity

Conclusion/Summary [Product] : Not available.

Reproductive toxicity

Product/ingredient name	Result

SECTION 11: Toxicological information

dodecamethylcyclohexasiloxane	**Rat - Oral** ≥1000 mg/kg - NOAEL Maternal toxicity: Negative Fertility effects: Negative Developmental: Negative	OECD 414/422 [Prenatal Developmental Toxicity Study/ Combined Repeated Dose Toxicity Study with the Reproduction/ Developmental Toxicity Screening Test]
decamethylcyclopentasiloxane	**Rat - Inhalation** 3.64 mg/kg - NOAEL	OECD 416 [Two-Generation Reproduction Toxicity Study]
2,4,6,8-tetramethyl-2,4,6,8-tetravinylcyclotetrasiloxane	**Rat - Oral** 15 mg/kg - NOAEL Fertility effects: Positive	OECD 421 [Reproduction/ Developmental Toxicity Screening Test]
octamethylcyclotetrasiloxane	**Rat - Inhalation** 3.64 mg/kg - NOAEL Fertility effects: Positive Developmental: Negative	OECD 416 [Two-Generation Reproduction Toxicity Study]

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Result
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	STOT RE 2, H373 (lungs) (inhalation)

Aspiration hazard

Not available.

Information on likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

SECTION 11: Toxicological information

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Product/ingredient name	Result	
Platinum, 1,3-diethenyl-1,1,3,3-tetramethyldisiloxane complexes	**Chronic - Rat - Oral - NOAEL** 125 mg/kg	OECD 422 [Combined Repeated Dose Toxicity Study with the Reproduction/Developmental Toxicity Screening Test]
1,1,3,3-tetramethyl-1,3-divinyldisiloxane	**Chronic - Rat - Oral - LOAEL** 150 mg/kg [28 days]	Toxic effects: liver, kidney OECD 422 [Combined Repeated Dose Toxicity Study with the Reproduction/Developmental Toxicity Screening Test]
	Chronic - Rat - Oral - NOAEL 50 mg/kg [28 days]	Toxic effects: liver, kidney OECD 422 [Combined Repeated Dose Toxicity Study with the Reproduction/Developmental Toxicity Screening Test]
	Chronic - Rat - Oral - LOAEL 300 mg/kg [90 days]	Toxic effects: liver, kidney OECD 408 [Repeated Dose 90-Day Oral Toxicity Study in Rodents]
	Chronic - Rat - Oral - NOAEL 65 mg/kg [90 days]	Toxic effects: liver, kidney OECD 408 [Repeated Dose 90-Day Oral Toxicity Study in Rodents]
	Chronic - Rat - Male, Female - Inhalation - NOAEL Vapour 250 ppm [14 days]	OECD 412 [Repeated Dose Inhalation Toxicity: 28-day or 14-day Study]
dodecamethylcyclohexasiloxane	**Chronic - Rat - Oral - NOAEL** ≥1000 mg/kg	OECD 422 [Combined Repeated Dose Toxicity Study with the Reproduction/Developmental Toxicity Screening Test]
	Chronic - Rat - Inhalation - NOAEL Vapour 0.0182 mg/l [7 days per week] [6 hours]	OECD 413 [Subchronic Inhalation Toxicity: 90-day Study]
decamethylcyclopentasiloxane	**Chronic - Rat - Oral - NOAEL** ≥1000 mg/kg	
	Chronic - Rat - Dermal - NOAEL ≥1600 mg/kg	
	Chronic - Rat - Male, Female -	OECD 453 [Combined Chronic

SECTION 11: Toxicological information

	Inhalation - NOAEL Vapour 2.42 mg/l [5 days per week] [6 hours]	Toxicity/Carcinogenicity Studies]
2,4,6,8-tetramethyl-2,4,6,8-tetravinylcyclotetrasiloxane	**Chronic - Rat - Male, Female - Oral - NOAEL** 15 mg/kg [13 weeks]	Toxic effects: ovary OECD 408 [Repeated Dose 90-Day Oral Toxicity Study in Rodents]
	Chronic - Rat - Male, Female - Oral - LOAEL 150 mg/kg [13 weeks]	Toxic effects: ovary OECD 408 [Repeated Dose 90-Day Oral Toxicity Study in Rodents]
octamethylcyclotetrasiloxane	**Sub-acute - Rabbit - Dermal - NOAEL** 960 mg/kg	OECD 410 [Repeated Dose Dermal Toxicity: 21/28-day Study]

Conclusion/Summary [Product] : Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

Conclusion/Summary [Product] : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	
Platinum, 1,3-diethenyl-1,1,3,3-tetramethyldisiloxane complexes	**Acute - NOEC** Fish - *Danio rerio* ≥10 mg/l [96 hours]	
	Acute - NOEC Daphnia - *Daphnia magna* ≥10 mg/l [48 hours]	
	Acute - IC50 Algae - *Selenastrum capricornutum* ≥10 mg/l [72 hours]	
	Acute - NOEC Algae - *Selenastrum capricornutum* ≥10 mg/l [72 hours]	
	EC10 Micro-organism 20 mg/l [3 minutes]	OECD 209 [Activated Sludge, Respiration Inhibition Test]

SECTION 12: Ecological information

1,1,3,3-tetramethyl-1,3-divinyldisiloxane	**Acute - LC50** Fish - *Oncorhynchus mykiss* >0.13 mg/l - No toxicity at the limit of water solubility. [96 hours]	OECD 203 [Fish, Acute Toxicity Test]
	Acute - EC50 Daphnia - *Daphnia magna* >0.1 mg/l - No toxicity at the limit of water solubility. [48 hours]	OECD 202 [Daphnia sp. Acute Immobilization Test and Reproduction Test]
	Acute - ErC50 Algae - *Pseudokirchneriella subcapitata* >0.12 mg/l - No toxicity at the limit of water solubility. [72 hours]	OECD 201 [Alga, Growth Inhibition Test]
	Acute - NOEC Algae - *Pseudokirchneriella subcapitata* ≥0.12 mg/l [72 hours]	OECD 201 [Alga, Growth Inhibition Test]
	Chronic - EC50 Daphnia - *Daphnia magna* ≥0.12 mg/l - No toxicity at the limit of water solubility. [21 days]	OECD 211 [Daphnia Magna Reproduction Test]
dodecamethylcyclohexasiloxane	**Acute - LC50** Fish - *Oncorhynchus mykiss* >0.016 mg/l [96 hours]	OECD 204 [Fish, Prolonged Toxicity Test: 14-Day Study]
	Acute - EC50 Daphnia - *Daphnia magna* >0.0029 mg/l [48 hours]	OECD 202 [Daphnia sp. Acute Immobilization Test and Reproduction Test]
	Acute - NOEC Algae - *Pseudokirchneriella subcapitata* ≥0.002 mg/l [72 hours]	OECD 201 [Alga, Growth Inhibition Test]
	Acute - EC50 Algae - *Pseudokirchneriella subcapitata* >0.002 mg/l [72 hours]	OECD 201 [Alga, Growth Inhibition Test]
	Chronic - NOEC Fish - *Oncorhynchus mykiss* ≥0.014 mg/l [90 days]	OECD 210 [Fish, Early-Life Stage Toxicity Test]
	Chronic - NOEC Daphnia - *Daphnia magna* ≥0.0046 mg/l [21 days]	OECD 211 [Daphnia Magna Reproduction Test]
decamethylcyclopentasiloxane	**Chronic - NOEC** Fish - *Oncorhynchus mykiss* ≥0.014 mg/l [90 days]	

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	Chronic - NOEC Daphnia - *Daphnia magna* ≥0.015 mg/l [21 days]	OECD 211 [Daphnia Magna Reproduction Test]
	Acute - EC50 Daphnia - *Daphnia magna* >0.0029 mg/l [48 hours]	OECD 202 [Daphnia sp. Acute Immobilization Test and Reproduction Test]
	Acute - EC50 Algae - *Pseudokirchneriella subcapitata* >0.012 mg/l [96 hours]	OECD 201 [Alga, Growth Inhibition Test]
	Acute - NOEC Algae - *Pseudokirchneriella subcapitata* ≥0.012 mg/l [96 hours]	OECD 201 [Alga, Growth Inhibition Test]
	Chronic - LC50 Fish - *Oncorhynchus mykiss* >0.016 mg/l [96 hours]	OECD 204 [Fish, Prolonged Toxicity Test: 14-Day Study]
2,4,6,8-tetramethyl-2,4,6,8-tetravinylcyclotetrasiloxane	**Acute - LL50** Fish - *Cyprinodon variegatus* >1000 mg/l [96 hours]	OECD 203 [Fish, Acute Toxicity Test]
	Acute - LL50 Daphnia - *Acartia tonsa);* 272 mg/l [48 hours]	
	Acute - NOELR Daphnia - *Acartia tonsa);* 100 mg/l [48 hours]	
	Chronic - NOEC Daphnia - *Daphnia magna* 0.0079 mg/l - (similar material) [21 days]	OECD 211 [Daphnia Magna Reproduction Test]
	Chronic - NOEC Fish - *Oncorhynchus mykiss* ≥0.0044 mg/l - (similar material) [93 days]	OECD 210 [Fish, Early-Life Stage Toxicity Test]
octamethylcyclotetrasiloxane	**Chronic - NOEC - Fresh water** Fish - Rainbow trout,donaldson trout - *Oncorhynchus mykiss* - Egg Age: 2 hours 4.4 µg/l [90 days]	Effect: Multiple
	Acute - LC50 Fish - *Oncorhynchus mykiss* >0.022 mg/l [96 hours]	
	Chronic - NOEC Fish - *Oncorhynchus mykiss*	

SECTION 12: Ecological information

≥0.0044 mg/l [93 days]

Chronic - NOEC
Daphnia - *Daphnia magna*
0.015 mg/l [21 days]

Acute - EC50
Algae - *Selenastrum capricornutum*
>0.022 mg/l [96 hours]

Chronic - NOEC - Fresh water — Effect: Mortality
Daphnia - Water flea - *Daphnia magna*
Age: <24 hours
7.9 µg/l [21 days]

Acute - EC50 - Fresh water
Daphnia - *Daphnia magna*
>0.015 mg/l [48 hours]

Chronic - NOEC — Effect: Population
Algae - Green algae - *Selenastrum capricornutum*
1 to 29 µg/l [96 hours]
STDMETH

Conclusion/Summary [Product] : Not available.

12.2 Persistence and degradability

Product/ingredient name	Result	
1,1,3,3-tetramethyl-1,3-divinyldisiloxane	**Aerobic - 2 mg/l** 0.9% [28 days] - Not readily	OECD 301 D [Ready Biodegradability - Closed Bottle Test]
dodecamethylcyclohexasiloxane	**Aerobic** 4.47% [28 days] - Not readily	OECD 310 [Ready Biodegradability - CO2 in Sealed Vessels (Headspace Test)]
decamethylcyclopentasiloxane	**Aerobic** 0.14% [28 days] - Not readily	OECD 310 [Ready Biodegradability - CO2 in Sealed Vessels (Headspace Test)]
2,4,6,8-tetramethyl-2,4,6,8-tetravinylcyclotetrasiloxane	**Aerobic** 3.7% [29 days] - Not readily	OECD 310 [Ready Biodegradability - CO2 in Sealed Vessels (Headspace Test)]
octamethylcyclotetrasiloxane	**Aerobic - 10 mg/l** 3.7% [28 days] - Not readily	OECD [Ready Biodegradability - CO2 in Sealed Vessels (Headspace Test)]

Conclusion/Summary [Product] : Not available.

SECTION 12: Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Platinum, 1,3-diethenyl-1,1,3,3-tetramethyldisiloxane complexes	-	-	Not readily
1,1,3,3-tetramethyl-1,3-divinyldisiloxane	-	-	Not readily
dodecamethylcyclohexasiloxane	-	-	Not readily
decamethylcyclopentasiloxane	-	-	Not readily
octamethylcyclotetrasiloxane	-	-	Not readily

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Platinum, 1,3-diethenyl-1,1,3,3-tetramethyldisiloxane complexes	5.96	-	High
1,1,3,3-tetramethyl-1,3-divinyldisiloxane	-	1971	High
dodecamethylcyclohexasiloxane	8.87	1660 [OECD 305]	High
decamethylcyclopentasiloxane	8.023	7060 [OECD 305]	High
2,4,6,8-tetramethyl-2,4,6,8-tetravinylcyclotetrasiloxane	-	12400	High
octamethylcyclotetrasiloxane	6.488	13400 [EPA OTS 797.1520]	High

12.4 Mobility in soil

Soil/water partition coefficient

Product/ingredient name	logKoc	Koc
1,1,3,3-tetramethyl-1,3-divinyldisiloxane	2.7	524.789
dodecamethylcyclohexasiloxane	4.4	25167.8
decamethylcyclopentasiloxane	3.9	8156.49
2,4,6,8-tetramethyl-2,4,6,8-tetravinylcyclotetrasiloxane	3.7	4975.5
octamethylcyclotetrasiloxane	3.5	3064.9

Results of PMT and vPvM assessment

Product/ingredient name	PMT	P	M	T	vPvM	vP	vM
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	N/A	N/A	N/A	Yes	N/A	N/A	N/A
Platinum, 1,3-diethenyl-1,1,3,3-tetramethyldisiloxane complexes	N/A	N/A	N/A	Yes	N/A	N/A	N/A
1,1,3,3-tetramethyl-1,3-divinyldisiloxane	N/A	N/A	Yes	Yes	No	N/A	No
dodecamethylcyclohexasiloxane	No	Yes	No	Yes	No	Yes	No
decamethylcyclopentasiloxane	No	Yes	No	Yes	No	Yes	No
2,4,6,8-tetramethyl-2,4,6,8-tetravinylcyclotetrasiloxane	No	N/A	No	Yes	No	N/A	No
octamethylcyclotetrasiloxane	No	Yes	No	Yes	No	Yes	No

Mobility : Not available.

SECTION 12: Ecological information

Conclusion/Summary : The product does not meet the criteria to be considered as a PMT or vPvM.

12.5 Results of PBT and vPvB assessment

Regulation (EC) No. 1907/2006 [REACH]

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	N/A	N/A	N/A	Yes	N/A	N/A	N/A
Platinum, 1,3-diethenyl-1,1,3,3-tetramethyldisiloxane complexes	N/A	N/A	N/A	Yes	N/A	N/A	N/A
1,1,3,3-tetramethyl-1,3-divinyldisiloxane	No	N/A	No	Yes	No	N/A	No
dodecamethylcyclohexasiloxane	Yes	Yes	Yes	Yes	Yes	Yes	Yes
decamethylcyclopentasiloxane	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2,4,6,8-tetramethyl-2,4,6,8-tetravinylcyclotetrasiloxane	N/A	N/A	Yes	Yes	N/A	N/A	Yes
octamethylcyclotetrasiloxane	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Regulation (EC) No. 1272/2008 [CLP]

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	N/A	N/A	N/A	Yes	N/A	N/A	N/A
Platinum, 1,3-diethenyl-1,1,3,3-tetramethyldisiloxane complexes	N/A	N/A	N/A	Yes	N/A	N/A	N/A
1,1,3,3-tetramethyl-1,3-divinyldisiloxane	No	N/A	No	Yes	No	N/A	No
dodecamethylcyclohexasiloxane	Yes	Yes	Yes	Yes	Yes	Yes	Yes
decamethylcyclopentasiloxane	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2,4,6,8-tetramethyl-2,4,6,8-tetravinylcyclotetrasiloxane	N/A	N/A	Yes	Yes	N/A	N/A	Yes
octamethylcyclotetrasiloxane	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Conclusion/Summary Regulation (EC) No. 1272/2008 [CLP] : Strongly accumulates in the environment and living organisms including in humans.

12.6 Endocrine disrupting properties

Not available.

Conclusion/Summary [Product] : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

European waste catalogue (EWC)

Waste code	Waste designation
07 02 17	waste containing silicones other than those mentioned in 07 02 16

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Type of packaging	European waste catalogue (EWC)	
Cylinder	15 01 02	plastic packaging

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	Not regulated.	9006	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (octamethylcyclotetrasiloxane)	-	-
14.3 Transport hazard class(es)	-	9	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	Yes.	No.	No.

Additional information

SECTION 14: Transport information

ADN : The product is only regulated as a dangerous good when transported in tank vessels.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

Ingredient name	Intrinsic property	Status	Reference number	Date of revision
dodecamethylcyclohexasiloxane	PBT	Recommended	10th recommendation	4/14/2021
decamethylcyclopentasiloxane	-	Recommended	10th recommendation	4/14/2021
octamethylcyclotetrasiloxane	-	Recommended	10th recommendation	4/14/2021
dodecamethylcyclohexasiloxane	vPvB	Recommended	10th recommendation	4/14/2021
decamethylcyclopentasiloxane	-	Recommended	10th recommendation	4/14/2021
octamethylcyclotetrasiloxane	-	Recommended	10th recommendation	4/14/2021

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Product/ingredient name	%	Designation [Usage]
REPLISET-F1, -F5, -T1, -T3, -GF1, -GT1 - Part B	≥90	3
dodecamethylcyclohexasiloxane	≥0.1 - <1	70
decamethylcyclopentasiloxane	≥0.1 - <1	70
octamethylcyclotetrasiloxane	≥0.01 - <0.1	70

Labelling : Not applicable.
The following paragraph from the annex of Regulation (EU) 2024/1328 - Entry 70 applies: 6. By way of derogation, paragraph 1, point (c), shall not apply to the placing on the market of mixtures that contain D4, D5 or D6 as residues from silicone polymers, under the following conditions: (a) D4, D5 or D6 in a concentration equal to or less than 1 % by weight of the respective substance in the mixture, for use in adhesion, sealing, gluing and casting.

Other EU regulations

SECTION 15: Regulatory information

Explosive precursors : Not applicable.

Ozone depleting substances (EU 2024/590)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

15.2 Chemical safety assessment : The supplier has not performed a chemical safety assessment for the substance/ product.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms :
ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
B = Bioaccumulative
BCF = Bioconcentration Factor
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
IATA = International Air Transport Association
IMDG = International Maritime Dangerous Goods
IMO = International Maritime Organization
M = Mobile
N/A = Not available
P = Persistent
PBT = Persistent, Bioaccumulative and Toxic
PMT = Persistent, Mobile and Toxic

SECTION 16: Other information

PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SGG = Segregation Group
T = Toxic
vB = Very Bioaccumulative
vM = Very Mobile
vP = Very Persistent
vPvB = Very Persistent and Very Bioaccumulative
vPvM = Very Persistent and Very Mobile

Key literature references and sources for data : Regulation (EC) No. 1272/2008 [CLP]; European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), concluded in Geneva on 30 September 1957 plus amendments (Uniform text: Journal of Laws 27/2009 pos. 162 plus amendments); European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN); Occupational exposure limits; International regulations

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Aquatic Chronic 3, H412	Calculation method
PBT, EUH440	Calculation method
vPvB, EUH441	Calculation method

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H360Fd	May damage fertility. Suspected of damaging the unborn child.
H361	Suspected of damaging fertility or the unborn child.
H361d	Suspected of damaging the unborn child.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH440	Accumulates in the environment and living organisms including in humans.
EUH441	Strongly accumulates in the environment and living organisms including in humans.
EUH066	Repeated exposure may cause skin dryness or cracking.

Full text of classifications [CLP/GHS]

Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
PBT	PERSISTENT, BIOACCUMULATIVE AND TOXIC
Repr. 1B	REPRODUCTIVE TOXICITY - Category 1B
Repr. 2	REPRODUCTIVE TOXICITY - Category 2
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
vPvB	VERY PERSISTENT AND VERY BIOACCUMULATIVE

Training advice : Ensure operatives are trained to minimise exposures. Training staff on good practice.

SECTION 16: Other information

Date of issue/ Date of revision	:	08/05/2026
Date of previous issue	:	20/03/2026
Version	:	4.01

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.