



SAFETY DATA SHEET DOWSIL CE 8401 EMULSION

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

1.1. Product identifier

Product name	DOWSIL CE 8401 EMULSION
Product number	12899
Synonyms; trade names	DOW CORNING CE 8401 EMULSION

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

Identified uses	Cosmetics
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1.3. Details of the supplier of the safety data sheet

Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com
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1.4. Emergency telephone number

Emergency telephone	SGS - +32 (0)3 575 55 55 (24h)
Sds No.	12899

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Not Classified
Health hazards	Skin Irrit. 2 - H315 Eye Irrit. 2 - H319
Environmental hazards	Not Classified

2.2. Label elements

Hazard pictograms



Signal word	Warning
Hazard statements	H315 Causes skin irritation. H319 Causes serious eye irritation.

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Precautionary statements

P264 Wash skin thoroughly after handling.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P332+P313 If skin irritation occurs: Get medical advice/ attention.
 P337+P313 If eye irritation persists: Get medical advice/ attention.
 P362+P364 Take off contaminated clothing and wash it before reuse.

2.3. Other hazards

This product contains a substance classified as PBT. This product contains a substance classified as vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

AMINO MODIFIED POLYSILOXANE REACTED WITH POLYOXYALKYLENE			>= 17.0 - <= 25.0 %
CAS number: 921936-12-1			
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319			
DECAMETHYLCYCLOPENTASILOXANE			>= 0.26 - <= 0.45 %
CAS number: 541-02-6	EC number: 208-764-9	REACH registration number: 01-2119511367-43-XXXX	
Classification Not Classified			
OCTAMETHYLCYCLOTETRASILOXANE			>= 0.11 - <= 0.25 %
CAS number: 556-67-2	EC number: 209-136-7	REACH registration number: 01-2119529238-36-XXXX	
Classification Flam. Liq. 3 - H226 Repr. 2 - H361f Aquatic Chronic 4 - H413			
DODECAMETHYLCYCLOHEXASILOXANE			>= 0.15 - <= 0.19 %
CAS number: 540-97-6	EC number: 208-762-8	REACH registration number: 01-2119517435-42-XXXX	
Classification Not Classified			

The full text for all hazard statements is displayed in Section 16.

Composition comments

The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

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General information	First aid personnel should wear appropriate protective equipment during any rescue. Wear protective clothing as described in Section 8 of this safety data sheet.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting unless under the direction of medical personnel. Get medical attention if any discomfort continues.
Skin contact	After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Get medical attention if any discomfort continues. Provide shower facilities near the workplace.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

Inhalation	Gas or vapour in high concentrations may irritate the respiratory system.
Ingestion	Overexposure may cause the following adverse effects: Nausea, vomiting. Gastrointestinal symptoms, including upset stomach.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation. Irritation of eyes and mucous membranes.

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

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	When heated and in case of fire, toxic vapours/gases may be formed.
Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Formaldehyde Oxides of the following substances: Carbon. Silicon. Nitrogen.

5.3. Advice for firefighters

Protective actions during firefighting	No action shall be taken without appropriate training or involving any personal risk. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Do not use water jet as an extinguisher, as this will spread the fire. Contain and collect extinguishing water. Avoid the spillage or runoff entering drains, sewers or watercourses. Evacuate area.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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Personal precautions Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if safe to do so. Absorb spillage with inert, damp, non-combustible material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid contact with skin, eyes and clothing. Avoid inhalation of vapours and spray/mists. Avoid spilling. Avoid release to the environment. Observe good chemical hygiene practices. Product residues retained in emptied containers can be hazardous. Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Only store in correctly labelled containers. Store locked up. Store away from the following materials: Strong oxidising agents.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

DECAMETHYLCYCLOPENTASILOXANE

Long-term exposure limit (8-hour TWA): SUP 10 ppm

OCTAMETHYLCYCLOTETRAISILOXANE

Long-term exposure limit (8-hour TWA): SUP 10 ppm

Ingredient comments Observe any occupational exposure limits for the product or ingredients.

DECAMETHYLCYCLOPENTASILOXANE (CAS: 541-02-6)

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DNEL

Workers - Inhalation; Short term systemic effects: 97.3 mg/m³
 Workers - Inhalation; Short term local effects: 24.2 mg/m³
 Workers - Inhalation; Long term systemic effects: 97.3 mg/m³
 Workers - Inhalation; Long term local effects: 24.2 mg/m³
 Consumer - Inhalation; Short term systemic effects: 17.3 mg/m³
 Consumer - Inhalation; Short term local effects: 4.3 mg/m³
 Consumer - Inhalation; Long term systemic effects: 17.3 mg/m³
 Consumer - Inhalation; Long term local effects: 4.3 mg/m³
 Consumer - Oral; Short term systemic effects: 5 mg/kg/day
 Consumer - Oral; Long term systemic effects: 5 mg/kg/day

PNEC

- Fresh water; >0.0012 mg/l
- marine water; >0.00012 mg/l
- Sediment (Freshwater); 2.4 mg/kg
- Sediment (Marinewater); 0.24 mg/kg
- Soil; 1.1 mg/kg
- STP; >10 mg/l

OCTAMETHYLCYCLOTETRASILOXANE (CAS: 556-67-2)

DNEL

Workers - Inhalation; Short term systemic effects: 73 mg/m³
 Workers - Inhalation; Short term local effects: 73 mg/m³
 Workers - Inhalation; Long term systemic effects: 73 mg/m³
 Workers - Inhalation; Long term local effects: 73 mg/m³
 Consumer - Inhalation; Short term systemic effects: 13 mg/m³
 Consumer - Inhalation; Short term local effects: 13 mg/m³
 Consumer - Inhalation; Long term systemic effects: 13 mg/m³
 Consumer - Inhalation; Long term local effects: 13 mg/m³
 Consumer - Oral; Short term systemic effects: 3.7 mg/kg/day
 Consumer - Oral; Long term systemic effects: 3.7 mg/kg/day

PNEC

- Fresh water; 0.00044 mg/l
- marine water; 0.000044 mg/l
- Sediment (Freshwater); 0.64 mg/kg
- Sediment (Marinewater); 0.064 mg/kg
- Soil; 0.13 mg/kg
- STP; > 10 mg/l

DODECAMETHYLCYCLOHEXASILOXANE (CAS: 540-97-6)

DNEL

Workers - Inhalation; Long term systemic effects: 11 mg/m³
 Workers - Inhalation; Short term local effects: 6.1 mg/m³
 Workers - Inhalation; Long term local effects: 1.22 mg/m³
 Consumer - Oral; Short term systemic effects: 1.7 mg/kg/day
 Consumer - Inhalation; Short term local effects: 1.5 mg/m³
 Consumer - Inhalation; Long term systemic effects: 2.7 mg/m³
 Consumer - Oral; Long term systemic effects: 1.7 mg/kg/day
 Consumer - Inhalation; Long term local effects: 0.3 mg/m³

PNEC

- Sediment (Freshwater); 2.826 mg/kg
- Sediment (Marinewater); 0.282 mg/kg
- Soil; 3.336 mg/kg
- STP; >1.0 mg/l

8.2. Exposure controls

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Protective equipment



Appropriate engineering controls

Provide adequate ventilation. As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. The selected gloves should have a breakthrough time of at least 2 hours. Butyl rubber. Chloroprene rubber. Neoprene. Polyethylene. Polyvinyl chloride (PVC). Viton rubber (fluoro rubber). Rubber (natural, latex). Nitrile rubber. Thickness: > 0.35 mm Do not use the following: Polyvinyl alcohol (PVA). To protect hands from chemicals, gloves should comply with European Standard EN374.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

Hygiene measures

When using do not eat, drink or smoke. Wash at the end of each work shift and before eating, smoking and using the toilet. Remove contaminated clothing and protective equipment before entering eating areas. Eye wash facilities and emergency shower must be available when handling this product.

Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. If ventilation is inadequate, suitable respiratory protection must be worn. Organic vapour filter. Combination filter, type A2/P2. EN 136/140/141/145/143/149

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	White.
Odour	Slight.
Odour threshold	No information available.
pH	No information available.
Melting point	No information available.
Pour Point	No information available.
Freezing Point	No information available.
Initial boiling point and range	> 35°C @ 760 mm Hg
Flash point	> 100°C Closed cup.
Evaporation rate	No information available.

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Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	0.97
Bulk density	No information available.
Solubility(ies)	No information available.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	170 mm ² /s @ 25°C
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	No information available.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information	Not determined.
Refractive index	No information available.
Particle size	No information available.
Molecular weight	No information available.
Volatility	No information available.
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	The following materials may react with the product: Strong oxidising agents.
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10.4. Conditions to avoid

Conditions to avoid	None known.
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10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Formaldehyde Oxides of the following substances: Carbon. Silicon. Nitrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) This product has low toxicity. Not determined. Information given is applicable to the major ingredient. LD₅₀ > 5000 mg/kg, Oral, Rat Estimated value.

Acute toxicity - dermal

Notes (dermal LD₅₀) Not determined. Information given is applicable to the major ingredient. LD₅₀ > 2000 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Notes (inhalation LC₅₀) No information available.

Skin corrosion/irritation

Animal data Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation No information available.

Germ cell mutagenicity

Genotoxicity - in vitro Information given is applicable to the major ingredient. Negative.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility Contains a substance/a group of substances which may damage fertility.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Information given is applicable to the major ingredient. Based on available data the classification criteria are not met. Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

Inhalation

Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion

Overexposure may cause the following adverse effects: Nausea, vomiting. Gastrointestinal symptoms, including upset stomach.

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Skin contact Causes skin irritation.

Eye contact Causes serious eye irritation.

Toxicological information on ingredients.

DECAMETHYLCYCLOPENTASILOXANE

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ > 24134 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 2000 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ dust/mist mg/l) 8.67

Species Rat

Notes (inhalation LC₅₀) LC₅₀ 8.67 mg/l, 4 hours, Dust/Mist Rat

ATE inhalation (dusts/mists mg/l) 8.67

Skin corrosion/irritation

Skin corrosion/irritation Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Not irritating.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Not sensitising. Mouse

Germ cell mutagenicity

Genotoxicity - in vitro This substance has no evidence of mutagenic properties. Negative.

Carcinogenicity

Carcinogenicity Results from a 2 year repeated vapour inhalation exposure study to rats of decamethylcyclotrisiloxane (D5) indicate effects (uterine endometrial tumors) in female animals. This finding occurred at the highest exposure dose (160 ppm) only. Studies to date have not demonstrated if this effect occurs through a pathway that is relevant to humans.

Reproductive toxicity

Reproductive toxicity - fertility No evidence of reproductive toxicity in animal studies.

Reproductive toxicity - development No evidence of reproductive toxicity in animal studies.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

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STOT - repeated exposure Based on available data the classification criteria are not met. Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

Inhalation Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion May cause discomfort if swallowed.

Skin contact Skin irritation should not occur when used as recommended.

Eye contact Vapour or spray in the eyes may cause irritation and smarting.

OCTAMETHYLCYCLOTETRAILOXANE

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ > 4800 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 2400 mg/kg, Dermal, Rat

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 2,975.0

Species Rat

Notes (inhalation LC₅₀) LC₅₀ 36 mg/l, 4 hours, Dust/Mist Rat OECD 403

ATE inhalation (vapours mg/l) 2,975.0

Skin corrosion/irritation

Skin corrosion/irritation Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Not irritating.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Not sensitising. Guinea pig

Germ cell mutagenicity

Genotoxicity - in vitro This substance has no evidence of mutagenic properties. Negative.

Carcinogenicity

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Carcinogenicity

Results from a 2 year repeated vapour inhalation exposure study to rats of octamethylcyclotetrasiloxane (D4) indicate effects (benign uterine adenomas) in the uterus of female animals. This finding occurred at the highest exposure dose (700 ppm) only. Studies to date have not demonstrated if these effects occur through pathways that are relevant to humans. Repeated exposure in rats to D4 resulted in protoporphyrin accumulation in the liver. Without knowledge of the specific mechanism leading to the protoporphyrin accumulation the relevance of this finding to humans is unknown.

Reproductive toxicity

Reproductive toxicity - fertility

Suspected of damaging fertility. Two-generation study - , Inhalation, Vapour, Rat

Reproductive toxicity - development

Teratogenicity: Based on available data the classification criteria are not met.
Developmental toxicity: - : , Inhalation, Vapour, Rabbit

Specific target organ toxicity - single exposure

STOT - single exposure

Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure

Not classified as a specific target organ toxicant after repeated exposure. No adverse effects known., Dose level: <= 100 mg/kg, Oral, Rat No adverse effects known., Dose level: <= 1mg/l/6h/d , Inhalation, Vapour, No adverse effects known., Dose level: <= 200 mg/kg, Dermal,

Aspiration hazard

Aspiration hazard

May be harmful if swallowed and enters airways.

Inhalation

Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion

May be harmful if swallowed and enters airways.

Skin contact

Skin irritation should not occur when used as recommended.

Eye contact

May cause temporary eye irritation.

Medical considerations

Octamethylcyclotetrasiloxane administered to rats by inhalation at concentrations of 500 and 700 ppm resulted in statistically significant decreases in the number of pups born and the live litter size in both the first and second generations. Prolonged estrous cycles, and decreased mating and fertility indices were observed following 700 ppm exposure in the second generation only. There were also increases in the incidence of deliveries of offspring extending over an unusually long time period (dystocia). Results from a 2 year repeated vapor inhalation exposure study to rats of octamethylcyclotetrasiloxane (D4) indicate effects (benign uterine adenomas) in the uterus of female animals. This finding occurred at the highest exposure dose (700 ppm) only. Studies to date have not demonstrated if these effects occur through pathways that are relevant to humans. Based on the available information on its potential to cause harm to human health, Health Canada, in a 2008 screening assessment, has concluded that octamethylcyclotetrasiloxane is not entering the environment in a quantity or concentration or under conditions that constitute or may constitute a danger in Canada to human life or health http://www.ec.gc.ca/substances/ese/eng/challenge/batch2/batch2_556-67-2.cfm). Repeated exposure in rats to D4 resulted in what appears to be protoporphyrin accumulation in the liver. Without knowledge of the specific mechanism leading to the protoporphyrin accumulation the relevance of this finding to humans is unknown.

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DODECAMETHYLCYCLOHEXASILOXANEAcute toxicity - oral

Notes (oral LD₅₀) LD₅₀ > 2000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 2000 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Not determined.

Skin corrosion/irritation

Skin corrosion/irritation Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation May cause temporary eye irritation.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Not sensitising. Guinea pig

Germ cell mutagenicity

Genotoxicity - in vitro This substance has no evidence of mutagenic properties. Negative.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met. Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

Inhalation

Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion

May cause discomfort if swallowed.

Skin contact

Skin irritation should not occur when used as recommended.

Eye contact

May cause temporary eye irritation.

SECTION 12: Ecological information**Ecotoxicity**

The product is not expected to be hazardous to the environment. However, large or frequent spills may have hazardous effects on the environment.

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Ecological information on ingredients.

DECAMETHYLCYCLOPENTASILOXANE

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

OCTAMETHYLCYCLOTETRASILOXANE

Ecotoxicity May cause long lasting harmful effects to aquatic life.

DODECAMETHYLCYCLOHEXASILOXANE

Ecotoxicity The product is not expected to be hazardous to the environment. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Toxicity Not considered toxic to fish.

Ecological information on ingredients.

DECAMETHYLCYCLOPENTASILOXANE

Toxicity Not toxic at limit of water solubility.

Acute aquatic toxicity

Acute toxicity - fish Not toxic at limit of water solubility.
LC₅₀, 96 hours: >16 µg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates Not toxic at limit of water solubility.
EC₅₀, 48 hours: >2.9 mg/l, Daphnia magna

Acute toxicity - aquatic plants Not toxic at limit of water solubility.
ErC₅₀, 96 hours: > 0.012 mg/l, Pseudokirchneriella subcapitata
Not toxic at limit of water solubility.
NOEC, 96 hours: 0.012 mg/l, Pseudokirchneriella subcapitata

Acute toxicity - terrestrial NOEC, : >= 76 mg/kg, Eisenia Fetida (Earthworm)

Chronic aquatic toxicity

Chronic toxicity - fish early life stage Not toxic at limit of water solubility.
LC₅₀, 14 day: >16 mg/l, Oncorhynchus mykiss (Rainbow trout)
Not toxic at limit of water solubility.
NOEC, 45 day: >= 0.017 mg/l, Oncorhynchus mykiss (Rainbow trout)
Not toxic at limit of water solubility.
NOEC, 90 day: >= 0.014 mg/l, Oncorhynchus mykiss (Rainbow trout)

Chronic toxicity - aquatic invertebrates NOEC, 21 days: 0.015 mg/l, Daphnia magna

OCTAMETHYLCYCLOTETRASILOXANE

Toxicity May cause long lasting harmful effects to aquatic life.

Acute aquatic toxicity

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Acute toxicity - fish	Not toxic at limit of water solubility. LC ₅₀ , 96 hours: > 0.022 mg/l, Oncorhynchus mykiss (Rainbow trout) Not toxic at limit of water solubility. LC ₅₀ , 14 day: > 0.0063 mg/l, Cyprinodon variegatus (Sheepshead minnow) LC ₅₀ , 14 day: 0.0063 mg/l, Cyprinodon variegatus (Sheepshead minnow) Not toxic at limit of water solubility.
Acute toxicity - aquatic invertebrates	Not toxic at limit of water solubility. EC ₅₀ , 96 hour: >0.0091 mg/l, Marinewater invertebrates (Mysidopsis bahia) Not toxic at limit of water solubility. EC ₅₀ , 48 hours: > 0.015 mg/l, Daphnia magna
Acute toxicity - aquatic plants	Not toxic at limit of water solubility. EC ₅₀ , 72 hours: 0.022 mg/l, Pseudokirchneriella subcapitata
<u>Chronic aquatic toxicity</u>	
Chronic toxicity - fish early life stage	Not toxic at limit of water solubility. NOEC, 93 day: >= 0.0044 mg/l, Oncorhynchus mykiss (Rainbow trout)
Chronic toxicity - aquatic invertebrates	Not toxic at limit of water solubility. NOEC, 21 day: >= 0.0079 mg/l, Daphnia magna

DODECAMETHYLCYCLOHEXASILOXANE

<u>Acute aquatic toxicity</u>	
Acute toxicity - aquatic plants	ErC ₅₀ , 72 hour: > 0.002 mg/l, Pseudokirchneriella subcapitata Not toxic at limit of water solubility.
<u>Chronic aquatic toxicity</u>	
Chronic toxicity - aquatic invertebrates	NOEC, 21 day: 0.0046 mg/l, Daphnia magna Not toxic at limit of water solubility.

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

Ecological information on ingredients.

DECAMETHYLCYCLOPENTASILOXANE

Persistence and degradability	The product is expected to be slowly biodegradable.
Biodegradation	- Degradation 0.14%: 28 days (OECD 310)

OCTAMETHYLCYCLOTETRAISILOXANE

Persistence and degradability	The product is expected to be slowly biodegradable.
Stability (hydrolysis)	pH7 - Half-life : 69.3 - 144 hour @ 24.6°C
Biodegradation	- Degradation 3.7%: 28 day OECD 310

DODECAMETHYLCYCLOHEXASILOXANE

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Persistence and degradability The product is not readily biodegradable.

Biodegradation - Degradation 4.5%: 28 days
OCED 301B

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

Ecological information on ingredients.

DECAMETHYLCYCLOPENTASILOXANE

Bioaccumulative potential BCF: > 500, Pimephales promelas (Fat-head Minnow)
BCF: 2010, Fish Estimated value.

Partition coefficient log Pow: 5.2

OCTAMETHYLCYCLOTETRAILOXANE

Bioaccumulative potential BCF: 12400, Pimephales promelas (Fat-head Minnow)

Partition coefficient log Pow: 6.49

DODECAMETHYLCYCLOHEXASILOXANE

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient log Pow: 8.87

12.4. Mobility in soil

Mobility No information available.

Ecological information on ingredients.

DECAMETHYLCYCLOPENTASILOXANE

Mobility Not considered mobile.

Adsorption/desorption coefficient - Koc: > 5000 @ 20°C Estimated value.

OCTAMETHYLCYCLOTETRAILOXANE

Mobility Not considered mobile.

Adsorption/desorption coefficient - Koc: > 5000 @ 20°C

DODECAMETHYLCYCLOHEXASILOXANE

Mobility Mobile.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product contains a substance classified as PBT. This product contains a substance classified as vPvB.

Ecological information on ingredients.

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DECAMETHYLCYCLOPENTASILOXANE

Results of PBT and vPvB assessment

Decamethylcyclotetrasiloxane (D5) meets the current REACH Annex XIII criteria for vPvB. However, D5 does not behave similarly to known PBT/vPvB substances. The weight of scientific evidence from field studies shows that D5 is not biomagnifying in aquatic and terrestrial food webs. D5 in air will degrade by reaction with naturally occurring hydroxyl radicals in the atmosphere. Any D5 in air that does not degrade by reaction with hydroxyl radicals is not expected to deposit from the air to water, to land, or to living organisms. Based on an independent scientific panel of experts, the Canadian Minister of the Environment has concluded that "D5 is not entering the environment in a quantity or concentration or under conditions that have or may have an immediate or long-term harmful effect on the environment or its biological diversity, or that constitute or may constitute a danger to the environment on which life depends".

OCTAMETHYLCYCLOTETRASILOXANE

Results of PBT and vPvB assessment

Octamethylcyclotetrasiloxane (D4) meets the current REACH Annex XIII criteria for PBT and vPvB. In Canada, D4 has been assessed and deemed to meet the PiT criteria. However, D4 does not behave similarly to known PBT/vPvB substances. The weight of scientific evidence from field studies shows that D4 is not biomagnifying in aquatic and terrestrial food webs. D4 in air will degrade by reaction with naturally occurring hydroxyl radicals in the atmosphere. Any D4 in air that does not degrade by reaction with hydroxyl radicals is not expected to deposit from the air to water, to land, or to living organisms.

DODECAMETHYLCYCLOHEXASILOXANE

Results of PBT and vPvB assessment

Dodecamethyl cyclohexasiloxane (D6) meets the current REACH Annex XIII criteria for vPvB. However, D6 does not behave similarly to known PBT/vPvB substances. The weight of scientific evidence from field studies shows that D6 is not biomagnifying in aquatic and terrestrial food webs. D6 in air will degrade by reaction with naturally occurring hydroxyl radicals in the atmosphere. Any D6 in air that does not degrade by reaction with hydroxyl radicals is not expected to deposit from the air to water, to land, or to living organisms.

12.6. Other adverse effects

Other adverse effects Not determined.

Ecological information on ingredients.

DECAMETHYLCYCLOPENTASILOXANE

Other adverse effects Not determined.

OCTAMETHYLCYCLOTETRASILOXANE

Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste should be treated as controlled waste. Do not puncture or incinerate, even when empty.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

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SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

SECTION 15: Regulatory information

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

EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Commission Regulation (EU) No 2015/830 of 28 May 2015.

Restrictions (Annex XVII Regulation 1907/2006)

CAUTION - Chemical may be subject to REACH RESTRICTIONS - see Annex XVII. This product is/contains a substance that is included in REGULATION (EC) No 1907/2006 (REACH) ANNEX XVII - RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES. Entry number: 70 Entry number: 3

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

Canada - DSL/NDL

Some of the ingredients are listed or exempt.
DSL

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US - TSCA

Some of the ingredients are listed or exempt.

China - IECSC

All the ingredients are listed or exempt.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
 CAS: Chemical Abstracts Service.
 DNEL: Derived No Effect Level.
 IATA: International Air Transport Association.
 IMDG: International Maritime Dangerous Goods.
 Kow: Octanol-water partition coefficient.
 LC₅₀: Lethal Concentration to 50 % of a test population.
 LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
 PBT: Persistent, Bioaccumulative and Toxic substance.
 PNEC: Predicted No Effect Concentration.
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
 vPvB: Very Persistent and Very Bioaccumulative.
 IARC: International Agency for Research on Cancer.
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
 cATpE: Converted Acute Toxicity Point Estimate.
 BCF: Bioconcentration Factor.
 BOD: Biochemical Oxygen Demand.
 EC₅₀: 50% of maximal Effective Concentration.
 LOAEC: Lowest Observed Adverse Effect Concentration.
 LOAEL: Lowest Observed Adverse Effect Level.
 NOAEC: No Observed Adverse Effect Concentration.
 NOAEL: No Observed Adverse Effect Level.
 NOEC: No Observed Effect Concentration.
 LOEC: Lowest Observed Effect Concentration.
 DMEL: Derived Minimal Effect Level.
 EL50: Exposure Limit 50
 hPa: Hectopascal
 LL50: Lethal Loading fifty
 OECD: Organisation for Economic Co-operation and Development
 POW: Octanol-water partition coefficient
 SCBA: self-contained breathing apparatus
 STP: Sewage Treatment Plant
 VOC: Volatile Organic Compounds

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
 Aquatic Acute = Hazardous to the aquatic environment (acute)
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Key literature references and sources for data

Supplier's information.

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Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	22/07/2020
Version number	4.000
Supersedes date	18/01/2019
SDS number	12899
SDS status	Approved.
Hazard statements in full	H226 Flammable liquid and vapour. H315 Causes skin irritation. H319 Causes serious eye irritation. H361f Suspected of damaging fertility. H413 May cause long lasting harmful effects to aquatic life.
Signature	Lisa Bland