



SAFETY DATA SHEET DOWSIL 979 EMULSION

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

1.1. Product identifier

Product name DOWSIL 979 EMULSION

Product number 63336

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

Identified uses Cosmetics

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

1.4. Emergency telephone number

Emergency telephone SGS - +32 (0)3 575 55 55 (24h)

Sds No. 63336

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 vPvB. This product contains a substance classified as PBT.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

DIMETHYL METHYL AMINOETHYLAMINOISOBUTYL SILOXANE METHOXY & HYDROXY TERMINATED			>= 34.0 - <= 65.0 %
CAS number: 831241-93-1			
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319			
ALCOHOLS C11 - C15 SECONDARY ETHOXYLATED			>= 1.0 - <= 6.0 %
CAS number: 68131-40-8			
Polymer			
Classification Eye Irrit. 2 - H319			
MONOPROPYLENE GLYCOL			<= 1.0 %
CAS number: 57-55-6	EC number: 200-338-0	REACH registration number: 01-2119456809-23-XXXX	
Classification Not Classified			
ALCOHOLS C11 - C15 SECONDARY ETHOXYLATED			>= 0.1 - <= 1.0 %
CAS number: 68131-40-8	EC number: 614-295-4		
Classification Skin Irrit. 2 - H315 Eye Dam. 1 - H318			
ALCOHOLS C12-14 SECONDARY ETHOXYLATED			>= 0.1 - <= 1.0 %
CAS number: 84133-50-6			
Classification Skin Irrit. 2 - H315 Eye Dam. 1 - H318			

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BENZYL ALCOHOL >= 0.3 - <= 1.0 %		
CAS number: 100-51-6	EC number: 202-859-9	REACH registration number: 01-2119492630-38-XXXX
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H332 Eye Irrit. 2 - H319		
2-PHENOXYETHANOL >= 0.3 - <= 1.0 %		
CAS number: 122-99-6	EC number: 204-589-7	REACH registration number: 01-2119488943-21-XXXX
Classification Acute Tox. 4 - H302 Eye Irrit. 2 - H319		
OCTAMETHYLCYCLOTETRASILOXANE >= 0.001 - <= 0.054 %		
CAS number: 556-67-2	EC number: 209-136-7	
M factor (Chronic) = 10		
Classification Flam. Liq. 3 - H226 Repr. 2 - H361f Aquatic Chronic 1 - H410		

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

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. Get medical attention if any discomfort continues.
Skin contact	Remove affected person from source of contamination. After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Get medical attention promptly if symptoms occur after washing.
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 promptly if symptoms occur after washing.

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

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Inhalation	Gas or vapour in high concentrations may irritate the respiratory system. Central nervous system depression. Headache. Dizziness. Drowsiness. Unconsciousness. Coughing. Difficulty in breathing.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.

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

Notes for the doctor	Treat symptomatically. 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

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.
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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.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Absorb spillage with non-combustible, absorbent 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.
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6.4. Reference to other sections

Reference to other sections	For personal protection, see Section 8. For waste disposal, see Section 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

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Usage 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. Avoid spilling. Avoid release to the environment. Observe good chemical hygiene practices. Product residues retained in emptied containers can be hazardous.

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 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

MONOPROPYLENE GLYCOL

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ particulate

Long-term exposure limit (8-hour TWA): WEL 150 ppm 474 mg/m³ total vapour and particulates

OCTAMETHYLCYCLOTETRASILOXANE

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

WEL = Workplace Exposure Limit.

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

DIMETHYL METHYL AMINOETHYLAMINOISOBUTYL SILOXANE METHOXY & HYDROXY TERMINATED **(CAS: 831241-93-1)**

Ingredient comments No exposure limits known for ingredient(s).

2-PHENOXYETHANOL (CAS: 122-99-6)

DNEL

Workers - Dermal; Long term systemic effects: 20.83 mg/kg/day
 Workers - Inhalation; Long term systemic effects: 8.07 mg/m³
 Workers - Inhalation; Long term local effects: 8.07 mg/m³
 Consumer - Oral; Short term systemic effects: 9.23 mg/kg/day
 Consumer - Dermal; Long term systemic effects: 10.42 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 2.41 mg/m³
 Consumer - Oral; Long term systemic effects: 9.23 mg/kg/day
 Consumer - Inhalation; Long term local effects: 2.41 mg/m³

PNEC

- Fresh water; 0.943 mg/l
 - marine water; 0.094 mg/l
 - Intermittent release; 3.44 mg/l
 - STP; 24.8 mg/l
 - Sediment (Freshwater); 7.23 mg/kg
 - Sediment (Marinewater); 0.723 mg/kg
 - Soil; 1.26 mg/kg

BENZYL ALCOHOL (CAS: 100-51-6)

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DNEL

Industry - Inhalation; Short term systemic effects: 110 mg/m³
 Industry - Inhalation; Long term systemic effects: 22 mg/m³
 Industry - Dermal; Short term systemic effects: 40 mg/kg/day
 Industry - Dermal; Long term systemic effects: 8 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 5.4 mg/m³
 Consumer - Inhalation; Short term systemic effects: 27 mg/m³
 Consumer - Dermal; Long term systemic effects: 4 mg/kg/day
 Consumer - Dermal; Short term systemic effects: 20 mg/kg/day
 Consumer - Oral; Long term systemic effects: 4 mg/kg/day
 Consumer - Oral; Short term systemic effects: 20 mg/kg/day

PNEC

- Fresh water; 1 mg/l
- marine water; 0.1 mg/l
- Intermittent release; 2.3 mg/l
- Soil; 0.456 mg/kg/day
- Sediment (Freshwater); 5.27 mg/kg/day
- Sediment (Marinewater); 0.527 mg/kg/day
- STP; 39 mg/l

MONOPROPYLENE GLYCOL (CAS: 57-55-6)

DNEL

General population - Inhalation; Long term systemic effects: 50 mg/m³
 General population - Inhalation; Long term local effects: 10 mg/m³
 Workers - Inhalation; Long term systemic effects: 168 mg/m³
 Workers - Inhalation; Long term local effects: 10 mg/m³
 General population - Dermal; Long term systemic effects: 213 mg/m³
 General population - Oral; Long term systemic effects: 85 mg/m³

PNEC

- Fresh water; 260 mg/l
- marine water; 26 mg/l
- STP; 20000 mg/l
- Sediment (Freshwater); 572 mg/kg
- Sediment (Marinewater); 57.2 mg/kg
- Soil; 50 mg/kg
- Intermittent release; 183 mg/l

OCTAMETHYLCYCLOTETRAILOXANE (CAS: 556-67-2)

DNEL

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

PNEC

- Fresh water; 0.0015 mg/l
- marine water; 0.00015 mg/l
- Sediment (Freshwater); 3 mg/kg
- Sediment (Marinewater); 0.3 mg/kg
- Soil; 0.54 mg/kg
- STP; 10 mg/l

8.2. Exposure controls

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Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure.

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. Rubber (natural, latex). Neoprene. Nitrile rubber. Polyvinyl chloride (PVC). Do not use the following: Polyvinyl alcohol (PVA). Thickness: > 0.35 mm To protect hands from chemicals, gloves should comply with European Standard EN374.

Other skin and body protection

Wear suitable protective clothing as protection against splashing or contamination.

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	Odourless. to Mild.
Odour threshold	No information available.
pH	pH (concentrated solution): 5
Melting point	No information available.
Pour Point	No information available.
Freezing Point	No information available.
Initial boiling point and range	>100°C @ 760 mm Hg
Flash point	100°C Closed cup.
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.

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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	0.99
Bulk density	No information available.
Solubility(ies)	No information available.
Partition coefficient	No information available.
Auto-ignition temperature	100°C
Decomposition Temperature	No information available.
Viscosity	1000 cP @ 25°C
Explosive properties	No information available.
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.
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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	Avoid excessive heat for prolonged periods of time.
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10.5. Incompatible materials

Materials to avoid	Strong oxidising agents.
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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, Estimated value.

Acute toxicity - dermal

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

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Not determined.

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation. Dryness and/or cracking.

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 No information available.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

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. Central nervous system depression. Headache. Dizziness. Drowsiness. Unconsciousness. Coughing. Difficulty in breathing.

Ingestion

May cause discomfort if swallowed.

Skin contact

Causes skin irritation.

Eye contact

Causes serious eye irritation. Profuse watering of the eyes.

Toxicological information on ingredients.

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DIMETHYL METHYL AMINOETHYLAMINOISOBUTYL SILOXANE METHOXY & HYDROXY TERMINATED

Acute toxicity - oral

Notes (oral LD₅₀) This product has low toxicity. Not determined. Information given is applicable to the major ingredient. LD₅₀ > 2000 mg/kg, Oral, Estimated value.

Acute toxicity - dermal

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

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Not determined.

Skin corrosion/irritation

Animal data This information is based on test data from similar products Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation. Fully reversible within 21 days. This information is based on test data from similar products

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation No information available.

Germ cell mutagenicity

Genotoxicity - in vitro Negative. Ames test

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

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 Causes skin irritation.

Eye contact Causes serious eye irritation.

ALCOHOLS C11 - C15 SECONDARY ETHOXYLATED

Acute toxicity - oral

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Notes (oral LD₅₀)	LD ₅₀ 2909 mg/kg, Oral, Rat
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	LD ₅₀ 4112 mg/kg, Dermal, Rabbit
<u>Acute toxicity - inhalation</u>	
Notes (inhalation LC₅₀)	Not determined.
<u>Skin corrosion/irritation</u>	
Skin corrosion/irritation	Prolonged skin contact may cause redness and irritation. Dryness and/or cracking.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Causes serious eye irritation.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	No information available.
<u>Skin sensitisation</u>	
Skin sensitisation	No information available.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	This information is based on test data from similar products Negative.
<u>Carcinogenicity</u>	
Carcinogenicity	No information available.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	No evidence of reproductive toxicity in animal studies.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Based on available data the classification criteria are not met. Not classified as a specific target organ toxicant after repeated exposure.
<u>Aspiration hazard</u>	
Aspiration hazard	Based on available data the classification criteria are not met.
<u>Inhalation</u>	
Inhalation	Gas or vapour in high concentrations may irritate the respiratory system.
<u>Ingestion</u>	
Ingestion	May cause discomfort if swallowed.
<u>Skin contact</u>	
Skin contact	Prolonged skin contact may cause redness and irritation.
<u>Eye contact</u>	
Eye contact	Causes serious eye irritation.

MONOPROPYLENE GLYCOL

<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD₅₀ mg/kg)	22,000.0
Species	Rat

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Notes (oral LD₅₀)	LD ₅₀ > 20000 mg/kg, Oral, Rat
ATE oral (mg/kg)	22,000.0
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	LD ₅₀ > 2000 mg/kg, Dermal, Rabbit
<u>Acute toxicity - inhalation</u>	
Notes (inhalation LC₅₀)	LC ₅₀ 41 mg/l, Inhalation, Rat
<u>Skin corrosion/irritation</u>	
Animal data	Not irritating. Rabbit OECD 404
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Not irritating. Rabbit OECD 405
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	No information available.
<u>Skin sensitisation</u>	
Skin sensitisation	Not sensitising. Guinea pig OECD 406
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	This substance has no evidence of mutagenic properties. Ames test Negative. OECD 473
<u>Carcinogenicity</u>	
Carcinogenicity	Based on available data the classification criteria are not met.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	This substance has no evidence of toxicity to reproduction.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	No information available.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	No information available.
<u>Aspiration hazard</u>	
Aspiration hazard	No information available.
<u>Inhalation</u>	
Inhalation	Gas or vapour in high concentrations may irritate the respiratory system.
<u>Ingestion</u>	
Ingestion	May cause discomfort if swallowed.
<u>Skin contact</u>	
Skin contact	Prolonged skin contact may cause temporary irritation.
<u>Eye contact</u>	
Eye contact	May cause temporary eye irritation.
<u>ALCOHOLS C11 - C15 SECONDARY ETHOXYLATED</u>	
<u>Acute toxicity - oral</u>	
Notes (oral LD₅₀)	This information is based on test data from similar products LD ₅₀ > 3000 mg/kg, Oral, Rat Estimated value.

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Acute toxicity - dermal

Notes (dermal LD₅₀) This information is based on test data from similar products LD₅₀ > 2000 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Not determined.

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation No information available.

Germ cell mutagenicity

Genotoxicity - in vitro This information is based on test data from similar products Negative.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Reproductive toxicity - development 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 Causes skin irritation.

Eye contact Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated.

ALCOHOLS C12-14 SECONDARY ETHOXYLATED

Acute toxicity - oral

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Notes (oral LD₅₀) This information is based on test data from similar products LD₅₀ > 3000 mg/kg, Oral, Rat Estimated value.

Acute toxicity - dermal

Notes (dermal LD₅₀) This information is based on test data from similar products LD₅₀ > 2000 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Not determined.

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation No information available.

Germ cell mutagenicity

Genotoxicity - in vitro This information is based on test data from similar products Negative.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Reproductive toxicity - development 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 Causes skin irritation.

Eye contact Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated.

BENZYL ALCOHOL

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Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,620.0

Species Rat

ATE oral (mg/kg) 1,620.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ 2000 mg/kg, Dermal, Rat

ATE dermal (mg/kg) 2,001.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 11.0

Species Rat

Acute toxicity inhalation (LC₅₀ dust/mist mg/l) 4,178.0

Species Rat

ATE inhalation (vapours mg/l) 11.0

ATE inhalation (dusts/mists mg/l) 4,178.0

Skin corrosion/irritation

Animal data Slightly irritating. Rabbit OECD 404

Serious eye damage/irritation

Serious eye damage/irritation Irritating to eyes. OECD 405

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation - Guinea pig: OECD 406 Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Genotoxicity - in vivo Based on available data the classification criteria are not met. OECD 474

Carcinogenicity

Carcinogenicity NOAEL 200 mg/kg/day, Oral, Mouse OECD 453 NOAEL > 400 mg/kg/day, Oral, Rat OECD 451 Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met. Fertility - NOAEL 1072 mg/kg/day, Inhalation, Rat

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

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Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 400 mg/kg, Oral, Rat

Aspiration hazard

Aspiration hazard No information available.

Inhalation Vapour may irritate respiratory system/lungs. Vapours may irritate throat/respiratory system. Symptoms following overexposure may include the following: Coughing. Vapours may cause headache, fatigue, dizziness and nausea. Harmful by inhalation.

Ingestion Harmful if swallowed. Nausea, vomiting. Diarrhoea. Headache. Ingestion of large amounts may cause unconsciousness.

Skin contact Prolonged and frequent contact may cause redness and irritation.

Eye contact Causes serious eye irritation.

2-PHENOXYETHANOL

Acute toxicity - oral

ATE oral (mg/kg) 500.0

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ > 1000 mg/m³, 6 hour, Dust/Mist Rat OECD 412

Skin corrosion/irritation

Skin corrosion/irritation May be slightly irritating to skin.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation - Human: Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Ames test: Negative. OECD 471 Chromosome aberration: Negative. OECD 473

Genotoxicity - in vivo Micronucleus assay: Negative. OECD 474

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility Two-generation study - NOAEL 375 mg/kg, Oral, Rat F1

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

DOWSIL 979 EMULSION

STOT - repeated exposure NOAEL 700 mg/kg, Oral, Rat

Aspiration hazard

Aspiration hazard No information available.

Inhalation May cause respiratory system irritation.

Ingestion Harmful if swallowed.

Skin contact Slightly irritating.

Eye contact Causes serious eye irritation.

OCTAMETHYLCYCLOTETRASILOXANE

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

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

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

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

DOWSIL 979 EMULSION

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.

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.

Ecological information on ingredients.

DIMETHYL METHYL AMINOETHYLAMINOISOBUTYL SILOXANE METHOXY & HYDROXY TERMINATED

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

ALCOHOLS C11 - C15 SECONDARY ETHOXYLATED

DOWSIL 979 EMULSION

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

MONOPROPYLENE GLYCOL

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

ALCOHOLS C11 - C15 SECONDARY ETHOXYLATED

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

ALCOHOLS C12-14 SECONDARY ETHOXYLATED

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

BENZYL ALCOHOL

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

2-PHENOXYETHANOL

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

OCTAMETHYLCYCLOTETRASILOXANE

Ecotoxicity Very toxic to aquatic life with long lasting effects.

12.1. Toxicity

Toxicity Not considered toxic to fish.

Ecological information on ingredients.

DIMETHYL METHYL AMINOETHYLAMINOISOBUTYL SILOXANE METHOXY & HYDROXY TERMINATED

Toxicity Not considered toxic to fish.

Acute aquatic toxicity

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: >100 mg/l, Daphnia magna

ALCOHOLS C11 - C15 SECONDARY ETHOXYLATED

Toxicity Not considered toxic to fish.

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 6.9 - 10.9 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates LC₅₀, 48 hours: 8.7 mg/l, Daphnia magna

Acute toxicity - microorganisms IC₅₀, 16 hours: > 1000 mg/l,

DOWSIL 979 EMULSION

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates

This information is based on test data from similar products
NOEC, 21 days: > 0.1 - 1 mg/l, Daphnia magna

MONOPROPYLENE GLYCOL

Toxicity

Not considered toxic to fish.

Acute aquatic toxicity

Acute toxicity - fish

LC₅₀, 96 hours: 40613 mg/l, Oncorhynchus mykiss (Rainbow trout)
LC₅₀, 96 hour: 55770 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: > 4000 mg/l, Daphnia magna

Acute toxicity - aquatic plants

EC₅₀, 96 hours: 19000 mg/l, Scenedesmus subspicatus
EC₅₀, 96 hour: 19100 mg/l, Skeletonema costatum
NOEC, 96 hour: 15000 mg/l, Scenedesmus subspicatus
NOEC, 14 day: < 5300 mg/l, Skeletonema costatum

Acute toxicity - microorganisms

NOEC, 18 hour: > 20000 mg/l, Pseudomonas putida

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates

NOEC, 7 days: 13020 mg/l, Daphnia magna
NOEC, 7 day: 29000 mg/l, Freshwater invertebrates
Ceriodaphnia sp.

ALCOHOLS C11 - C15 SECONDARY ETHOXYLATED

Toxicity

Not considered toxic to fish.

Acute aquatic toxicity

Acute toxicity - fish

This information is based on test data from similar products
LC₅₀, 96 hours: 3.5 - 4.9 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates

This information is based on test data from similar products
EC₅₀, 48 hours: 3.1 mg/l, Daphnia magna

ALCOHOLS C12-14 SECONDARY ETHOXYLATED

Toxicity

Not considered toxic to fish.

Acute aquatic toxicity

Acute toxicity - fish

This information is based on test data from similar products
LC₅₀, 96 hours: 3.5 - 4.9 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates

This information is based on test data from similar products
EC₅₀, 48 hours: 3.1 mg/l, Daphnia magna

BENZYL ALCOHOL

Toxicity

Not considered toxic to fish.

Acute aquatic toxicity

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Acute toxicity - fish	LC ₅₀ , 96 hours: 460 mg/l, Pimephales promelas (Fat-head Minnow) OECD 203 LC ₅₀ , 96 hour: 10 mg/l, Lepomis macrochirus (Bluegill)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 230 mg/l, Daphnia magna OECD 202
Acute toxicity - aquatic plants	IC ₅₀ , 72 hours: 770 mg/l, Algae NOEC, 72 hours: 310 mg/l, Pseudokirchneriella subcapitata OECD 201
Acute toxicity - microorganisms	IC ₅₀ , 49 hours: 2100 mg/l, Activated sludge
<u>Chronic aquatic toxicity</u>	
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 51 mg/l, Daphnia magna

2-PHENOXYETHANOL

Toxicity	Not considered toxic to fish.
<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 96 hours: 344 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: > 500 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: > 100 mg/l, Desmodesmus subspicatus OECD 201 EC ₁₀ , 72 hour: 46 mg/l, Desmodesmus subspicatus OECD 201
<u>Chronic aquatic toxicity</u>	
Chronic toxicity - fish early life stage	NOEC, 34 days: 23 mg/l, Pimephales promelas (Fat-head Minnow) LOEC, 34 days: 50 mg/l, Pimephales promelas (Fat-head Minnow)
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 9.43 mg/l, Daphnia magna LOEC, 21 days: 22.5 mg/l, Daphnia magna OECD 211

OCTAMETHYLCYCLOTETRAILOXANE

Toxicity	Very toxic to aquatic life with long lasting effects.
<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	Not toxic at limit of water solubility. LC ₅₀ , 96 hour: > 0.022 mg/l, Oncorhynchus mykiss (Rainbow trout) Not toxic at limit of water solubility. LC ₅₀ , 14 days: > 0.0063 mg/l, Cyprinodon variegatus (Sheepshead minnow)
Acute toxicity - aquatic invertebrates	Not toxic at limit of water solubility. EC ₅₀ , 96 hours: > 0.0091 mg/l, Mysidopsis bahia (opossum shrimp) Not toxic at limit of water solubility. EC ₅₀ , 48 hours: > 0.015 mg/l, Daphnia magna

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Acute toxicity - aquatic plants	Not toxic at limit of water solubility. ErC50, 96 hours: > 0.022 mg/l, Pseudokirchneriella subcapitata Not toxic at limit of water solubility. EC10, 96 hours: >= 0.022 mg/l, Pseudokirchneriella subcapitata
<u>Chronic aquatic toxicity</u>	
NOEC	0.001 < NOEC ≤ 0.01
Degradability	Non-rapidly degradable
M factor (Chronic)	10
Chronic toxicity - fish early life stage	Not toxic at limit of water solubility. NOEC, 93 days: >= 0.0044 mg/l, Oncorhynchus mykiss (Rainbow trout)
Chronic toxicity - aquatic invertebrates	Not toxic at limit of water solubility. NOEC, 21 days: 0.0079 mg/l, Daphnia magna

12.2. Persistence and degradability

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

Ecological information on ingredients.

DIMETHYL METHYL AMINOETHYLAMINOISOBUTYL SILOXANE METHOXY & HYDROXY TERMINATED

Persistence and degradability	There are no data on the degradability of this product.
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ALCOHOLS C11 - C15 SECONDARY ETHOXYLATED

Persistence and degradability	The product is readily biodegradable.
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MONOPROPYLENE GLYCOL

Persistence and degradability	The substance is readily biodegradable.
Biodegradation	- Degradation >81%: 28 days OECD 301F - Degradation 96%: 64 days
Biological oxygen demand	BOD5: 1170 mg O ₂ /l
Chemical oxygen demand	4700 mg O ₂ /l

ALCOHOLS C11 - C15 SECONDARY ETHOXYLATED

Persistence and degradability	The product is readily biodegradable.
Biodegradation	- Degradation > 60%: 28 days

ALCOHOLS C12-14 SECONDARY ETHOXYLATED

Persistence and degradability	The product is readily biodegradable.
Biodegradation	- Degradation > 60%: 28 days

DOWSIL 979 EMULSION

BENZYL ALCOHOL

Persistence and degradability	The product is readily biodegradable.
Biodegradation	- Degradation 92 - 96%: 14 days OECD 301C - Degradation 95 - 97%: 21 days OECD 301A

2-PHENOXYETHANOL

Persistence and degradability	The product is readily biodegradable.
Biodegradation	- Degradation > 90%: 15 day - Degradation 90%: 28 days

OCTAMETHYLCYCLOTETRASILOXANE

Persistence and degradability	The product is expected to be slowly biodegradable.
Stability (hydrolysis)	pH7 - Half-life, DT ₅₀ : 3.9 day @ 25°C pH7 - Half-life, DT ₅₀ : 16.7 days @ 12°C pH4 - Degradation, DT ₅₀ : 0.075 days @ 25°C
Biodegradation	- Degradation 3.7%: 28 day OECD 310

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

Ecological information on ingredients.

DIMETHYL METHYL AMINOETHYLAMINOISOBUTYL SILOXANE METHOXY & HYDROXY TERMINATED

Bioaccumulative potential	No data available on bioaccumulation.
Partition coefficient	No information available.

ALCOHOLS C11 - C15 SECONDARY ETHOXYLATED

Bioaccumulative potential	BCF: 17, Fish Estimated value.
Partition coefficient	log Pow: 2.39 Estimated value.

MONOPROPYLENE GLYCOL

Bioaccumulative potential	The product is not bioaccumulating. BCF: < 0.09,
Partition coefficient	log Pow: -1.07

ALCOHOLS C11 - C15 SECONDARY ETHOXYLATED

Bioaccumulative potential	BCF: 15 - 64, Fish Estimated value.
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DOWSIL 979 EMULSION

Partition coefficient log Pow: 3.3 - 4.4 Estimated value.

ALCOHOLS C12-14 SECONDARY ETHOXYLATED

Bioaccumulative potential BCF: 15 - 64, Fish Estimated value.

Partition coefficient log Pow: 3.3 - 4.4 Estimated value.

BENZYL ALCOHOL

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Partition coefficient : Log Kow 1.10

2-PHENOXYETHANOL

Bioaccumulative potential BCF: 0.35, QSAR

Partition coefficient log Pow: 1.2

OCTAMETHYLCYCLOTETRASILOXANE

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

Partition coefficient log Pow: 6.49

12.4. Mobility in soil

Mobility No information available.

Ecological information on ingredients.

DIMETHYL METHYL AMINOETHYLAMINOISOBUTYL SILOXANE METHOXY & HYDROXY TERMINATED

Mobility Not determined.

ALCOHOLS C11 - C15 SECONDARY ETHOXYLATED

Mobility No information available.

MONOPROPYLENE GLYCOL

Mobility The product is soluble in water.

Adsorption/desorption coefficient - Koc: 2.9 @ 20°C - Log Koc: 0.46 @ 20°C

Henry's law constant 0.00566 atm m³/mol @ 12°C

ALCOHOLS C11 - C15 SECONDARY ETHOXYLATED

Mobility No information available.

ALCOHOLS C12-14 SECONDARY ETHOXYLATED

Mobility No information available.

BENZYL ALCOHOL

DOWSIL 979 EMULSION

Mobility	The product is soluble in water.
Surface tension	39 mN/m @ 20°C OECD 115

2-PHENOXYETHANOL

Mobility	The product has poor water-solubility.
Adsorption/desorption coefficient	Soil, Water - : 1.6 @ 20°C
Surface tension	70.7 mN/m @ 19.9°C

OCTAMETHYLCYCLOTETRASILOXANE

Mobility	Not considered mobile.
Adsorption/desorption coefficient	- Koc: 16596 @ 20°C

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This product contains a substance classified as vPvB. This product contains a substance classified as PBT.
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Ecological information on ingredients.

DIMETHYL METHYL AMINOETHYLAMINOISOBUTYL SILOXANE METHOXY & HYDROXY TERMINATED

Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria.
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ALCOHOLS C11 - C15 SECONDARY ETHOXYLATED

Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria.
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MONOPROPYLENE GLYCOL

Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria.
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ALCOHOLS C11 - C15 SECONDARY ETHOXYLATED

Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria.
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ALCOHOLS C12-14 SECONDARY ETHOXYLATED

Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria.
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BENZYL ALCOHOL

Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria.
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2-PHENOXYETHANOL

DOWSIL 979 EMULSION

Results of PBT and vPvB assessment

This substance is not classified as PBT or vPvB according to current EU criteria.

OCTAMETHYLCYCLOTETRASILOXANE

Results of PBT and vPvB assessment

This substance is classified as PBT. This substance is classified as vPvB. 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.

12.6. Other adverse effects

Other adverse effects Not determined.

Ecological information on ingredients.

DIMETHYL METHYL AMINOETHYLAMINOISOBUTYL SILOXANE METHOXY & HYDROXY TERMINATED

Other adverse effects Not determined.

ALCOHOLS C11 - C15 SECONDARY ETHOXYLATED

Other adverse effects No information available.

MONOPROPYLENE GLYCOL

Other adverse effects No information required.

ALCOHOLS C11 - C15 SECONDARY ETHOXYLATED

Other adverse effects No information available.

ALCOHOLS C12-14 SECONDARY ETHOXYLATED

Other adverse effects No information available.

BENZYL ALCOHOL

Other adverse effects Not known.

2-PHENOXYETHANOL

Other adverse effects Not determined.

OCTAMETHYLCYCLOTETRASILOXANE

Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Do not puncture or incinerate, even when empty.

DOWSIL 979 EMULSION

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

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.

SECTION 16: Other information

DOWSIL 979 EMULSION

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.

Classification procedures according to Regulation (EC) 1272/2008

Skin Irrit. 2 - H315: Calculation method. Eye Irrit. 2 - H319: Calculation method.

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date

22/03/2022

DOWSIL 979 EMULSION

Version number	2.000
Supersedes date	11/03/2022
SDS number	63336
SDS status	Approved.
Hazard statements in full	H226 Flammable liquid and vapour. H302 Harmful if swallowed. H315 Causes skin irritation. H318 Causes serious eye damage. H319 Causes serious eye irritation. H332 Harmful if inhaled. H361f Suspected of damaging fertility. H410 Very toxic to aquatic life with long lasting effects.
Signature	Lisa Bland

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

Product Application Policy

To whom it may concern

Non-Supported Applications of Propylene Glycols (PGs)

For reasons of health and safety, regulatory compliance, and in accordance with internal policies **Univar Solutions**, will NOT supply Propylene Glycols (PGs) in a number of specific applications relating to pharmaceuticals, medicines, tobacco and tobacco products, marijuana products, food, feed, and dietary supplements. In order to maintain a high level of awareness amongst the customers, sales agents and distributors (including re-sellers and re-packagers) of **Univar Solutions**, we are writing to remind you of the non-supported applications for the Propylene Glycols (PGs). The use of such products is subject to the user's assessment of suitability, and compliance for its particular supplier-supported use. **Univar Solutions** will not support the applications listed in Annex 1 of this document.

Background

Based on a number of concerns and policies, including regulations to restrict product use, inappropriate exposure or contact and internal policies on specific application, **Univar Solutions** will not support Propylene Glycols (PGs) in the applications specified in Annex 1. We will not knowingly sample or sell these products for use in these non-supported applications, and will exit sales if necessary to support this position; however, we will make every effort to transition customers to appropriate products where possible.

General Non-Supported Applications

Product Scope:

All PG Products

The following identifies the applications that are generally, not supported by **Univar Solutions** for any Propylene Glycol (PG) product:

- Generation of artificial smoke/theatrical fogs/mists/artificial snow
- For use in the production of tobacco, the manufacture of tobacco products, the manufacture of electronic cigarettes or the manufacture of marijuana products
- Use as an active in pesticides¹
- Use as heat transfer fluids without inhibitors, including as an ingredient in fluids for warming or cooling foods or beverages or for heating an enclosed space where personnel exposure is possible²
- Manufacture of munitions or chemical weapons
- Ingredient in cat food

Notes

¹ **Univar Solutions** has not registered any PG product under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) for use as an active ingredient in pesticide formulas.

² Contact the **Univar Solutions** for properly inhibited PG-based fluids for heat transfer applications.

Univar Solutions does not provide samples of or knowingly sell any PG product for use in any General Non-Supported Application, unless otherwise agreed to in writing.

Technical or Industrial Grade Non-Supported Applications

Product Scope:

All Technical and Industrial PG grades, including, but not limited to:

- PG Industrial Grade (PGI)
- PG Technical Grade (PG TG)
- Dipropylene Glycol Regular Grade (DPG)
- Tripropylene Glycol Regular Grade (TPG)

- Tripropylene Glycol Acrylate Grade (TPG Ac)
- PG-Highers

The following identifies the applications that are NOT supported (“Technical or Industrial Grade Non-Supported Applications”) by **Univar Solutions** for any technical or industrial grade PG product:

- Any sensitive applications, including, but not limited to, pharmaceutical, direct and indirect food contact, cosmetics, personal care, animal feed, and children’s toys.
- All applications listed previously as General Non-Supported Applications

Univar Solutions does not provide samples of or knowingly sell any PG product for use in any Technical or Industrial Grade Non-Supported Application, unless otherwise agreed to in writing.

Specialty Grade Supported Applications

The following section identifies certain sensitive applications that are supported (“Specialty Grade Supported Applications”) by **Univar Solutions** for specialty grade products^{3,4}

Product Scope:

- Propylene Glycol USP/EP
- Propylene Glycol USP/EP (PG USP/EP)

is supported by **Univar Solutions** for the following applications:

- Pharmaceutical excipients⁵,
- direct and indirect food contact,
- beverage,
- cosmetics,
- personal care applications and children’s toys,
- animal feed (except cat food)⁶

Product Scope:

- Dipropylene Glycol LO+ Grade (DPG LO+)

is supported by **Univar Solutions** for the following applications:

- Indirect food contact,
- Cosmetics/personal care and
- Children’s toys

Product Scope:

- Propylene Glycol Animal Feed (PG AF)

is supported by **Univar Solutions** for the following applications

- Animal feed (except cat food)⁶

Notes

³ Re-packaging any specialty grade PG product for re-sale requires prior written approval by **Univar Solutions**.

⁴ Specialty grade PG product names may vary by region.

⁵ **Univar Solutions** does not test any PG USP/EP product for suitability in human parenteral applications (i.e., applications intended for humans where the drug formulation is administered not through the gastrointestinal tract, but is typically administered as an injection or infusion) and, therefore, does not support sales into these applications, unless otherwise agreed to in writing. **Univar Solutions** does not apply Active Pharmaceutical Ingredient (“API”) Good Manufacturing Practice (GMP) and, therefore, does not support the use of any PG USP/EP product as an API, unless otherwise agreed to in writing.

⁶ Where PG AG is not available, PG USP/EP is the PG product supported for animal feed (except cat food).

In the event that a customer is using a PG product that is contrary to the information provided above, **Univar Solutions** reserves the right to exit product sales to that customer.

Univar Solutions strongly encourage their customers to review both their manufacturing processes and their applications of the aforementioned PG products from the standpoint of human health and environmental quality to ensure that such products are used only in applications for which they are intended or tested. To enter into new applications beyond the traditional standard use applications, contact your **Univar Solutions** representative to review the specific application with our supplier. As use conditions and applicable laws may differ from one location to another and may change with time, when **Univar Solutions** supports an application, **Univar Solutions** does not warrant and is not responsible for the use in such application.

Please note **Univar Solutions** warrants that the products supplied meet the agreed specification but does not offer warranties as to fitness for purpose. You, as a user, must rely on your own testing in order to ascertain fitness for your intended purpose. Should you have any questions or require further information, please contact your **Univar Solutions** representative.

Whilst this policy is distributed with the SDS, it is to be considered as a separate document.

Yours sincerely,
Univar Solutions
Product Stewardship