



SAFETY DATA SHEET DOWSIL 8590 ADDITIVE

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

1.1. Product identifier

Product name	DOWSIL 8590 ADDITIVE
Product number	15200
Synonyms; trade names	DOW CORNING 8590 ADDITIVE
REACH registration notes	This product is not classified as hazardous, the information in this datasheet is given for guidance only.

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

Identified uses	ADDITIVE Softeners Textiles Leather treatment
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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.	15200

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Not Classified
Health hazards	Not Classified
Environmental hazards	Not Classified

2.2. Label elements

Hazard statements	NC Not Classified
Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P234 Keep only in original packaging. P403 Store in a well-ventilated place.
Supplemental label information	EUH210 Safety data sheet available on request.

2.3. Other hazards

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Some hydrogen gas may be released. Hydrogen is flammable and can form explosive mixtures with air. Avoid contact with the following materials: Water Alcohols. Acidic. Alkalis. Oxidising agents. This product contains substances classified as PBT. This product contains substances classified as vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

POLYPROPYLENE OXIDE MONOALLYL METHYL ETHER			>= 2.0 - <= 2.5 %
CAS number: 62744-60-9			
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319			
DODECAMETHYLCYCLOHEXASILOXANE			>= 0.05 - <= 0.11 %
CAS number: 540-97-6	EC number: 208-762-8	REACH registration number: 01-2119517435-42-XXXX	
Classification Not Classified			
DECAMETHYLCYCLOPENTASILOXANE			>= 0.05 - <= 0.11 %
CAS number: 541-02-6	EC number: 208-764-9	REACH registration number: 01-2119511367-43-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

General information	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	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 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 promptly if symptoms occur after washing.

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

Eye contact May cause temporary eye irritation.

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

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Notes for the doctor Treat symptomatically. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with the following media: Water spray. Alcohol-resistant foam. Carbon dioxide (CO₂).

Unsuitable extinguishing media Dry chemicals. 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 Some hydrogen gas may be released. Hydrogen is flammable and can form explosive mixtures with air. 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. Aldehydes. Alcohols. Ethers. Acids - organic. Formaldehyde Oxides of the following substances: Carbon. Silicon.

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.

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 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. Some hydrogen gas may be released. Hydrogen is flammable and can form explosive mixtures with air. Avoid contact with the following materials: Water Moisture. Acids. Alkalis. Avoid the spillage or runoff entering drains, sewers or watercourses. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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Usage precautions

Avoid contact with skin, eyes and clothing. Avoid inhalation of vapours and spray/mists. Do not allow contact with water. Protect from moisture. 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. This product slowly evolves hydrogen on storage. Containers can burst violently or explode when heated, due to excessive pressure build-up. Store away from the following materials: Strong oxidising agents. Water, moisture.

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

Ingredient comments

Observe any occupational exposure limits for the product or ingredients.

DECAMETHYLCYCLOPENTASILOXANE (CAS: 541-02-6)

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

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

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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

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: Tight-fitting safety glasses. 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. Neoprene. Nitrile rubber. Polyvinyl alcohol (PVA). Polyvinyl chloride (PVC). Viton rubber (fluoro rubber). Rubber (natural, latex). Thickness: > 0.35 mm 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	Colourless to pale yellow.
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.

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Initial boiling point and range	> 35°C @ 760 mm Hg
Flash point	> 100°C Tag closed cup.
Evaporation rate	No information available.
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	1.02
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	750 mPa.s
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

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Possibility of hazardous reactions

The following materials may react with the product: Strong oxidising agents. Will decompose at temperatures exceeding 150°C. Formaldehyde Some hydrogen gas may be released. Hydrogen is flammable and can form explosive mixtures with air. Avoid contact with the following materials: Water. Alcohols. Acids. Alkalis. Metals Hazardous decomposition products will be formed at elevated temperatures.

10.4. Conditions to avoid

Conditions to avoid Moisture.

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. Aldehydes. Alcohols. Ethers. Acids - organic. Formaldehyde Oxides of the following substances: Carbon. Silicon.

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 Estimated value.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Not determined.

Skin corrosion/irritation

Animal data Information given is applicable to the major ingredient. May be slightly irritating to skin.

Serious eye damage/irritation

Serious eye damage/irritation Information given is applicable to the major ingredient. May cause temporary eye irritation.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Information given is applicable to the major ingredient. Not sensitising. Guinea pig

Germ cell mutagenicity

Genotoxicity - in vitro Does not contain any substances known to be mutagenic.

Carcinogenicity

Carcinogenicity Does not contain any substances known to be carcinogenic.

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

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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 Liquid may irritate skin.

Eye contact May cause temporary eye irritation.

Toxicological information on ingredients.

DODECAMETHYLCYCLOHEXASILOXANE

Acute 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.

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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.

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 8.67
(LC₅₀ dust/mist mg/l)

Species Rat

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

ATE inhalation 8.67
(dusts/mists mg/l)

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 decamethylcycllopentasiloxane (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.

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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

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.

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.

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.

DECAMETHYLCYCLOPENTASILOXANE

Ecotoxicity The product components are not classified as environmentally hazardous. 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.

DODECAMETHYLCYCLOHEXASILOXANE

Acute aquatic toxicity

Acute toxicity - aquatic plants ErC50, 72 hour: > 0.002 mg/l, *Pseudokirchneriella subcapitata*
Not toxic at limit of water solubility.

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates NOEC, 21 day: 0.0046 mg/l, *Daphnia magna*
Not toxic at limit of water solubility.

DECAMETHYLCYCLOPENTASILOXANE

Toxicity Not toxic at limit of water solubility.

Acute aquatic toxicity

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Acute toxicity - fish	Not toxic at limit of water solubility. LC ₅₀ , 96 hours: >16 µg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	Not toxic at limit of water solubility. EC ₅₀ , 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)
<u>Chronic aquatic toxicity</u>	
Chronic toxicity - fish early life stage	Not toxic at limit of water solubility. LC ₅₀ , 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

12.2. Persistence and degradability

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

Ecological information on ingredients.

DODECAMETHYLCYCLOHEXASILOXANE

Persistence and degradability	The product is not readily biodegradable.
Biodegradation	- Degradation 4.5%: 28 days OCED 301B

DECAMETHYLCYCLOPENTASILOXANE

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

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

Ecological information on ingredients.

DODECAMETHYLCYCLOHEXASILOXANE

Bioaccumulative potential	Bioaccumulation is unlikely.
Partition coefficient	log Pow: 8.87

DECAMETHYLCYCLOPENTASILOXANE

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

Partition coefficient log Pow: 5.2

12.4. Mobility in soil

Mobility No information available.

Ecological information on ingredients.

DODECAMETHYLCYCLOHEXASILOXANE

Mobility Mobile.

DECAMETHYLCYCLOPENTASILOXANE

Mobility Not considered mobile.

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

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.

Ecological information on ingredients.

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.

DECAMETHYLCYCLOPENTASILOXANE

Results of PBT and vPvB assessment Decamethylcyclopentasiloxane (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".

12.6. Other adverse effects

Other adverse effects Not determined.

Ecological information on ingredients.

DECAMETHYLCYCLOPENTASILOXANE

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Other adverse effects Not determined.

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.

SECTION 14: Transport information

General	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).
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Air transport notes	Air transport : Ventilated containers are forbidden.
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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 Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

EU 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.
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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

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

Canada - DSL/NDSL

All the ingredients are listed or exempt.
DSL

US - TSCA

All the ingredients are listed or exempt.

Australia - AICS

All the ingredients are listed or exempt.

Korea - KECI

All the ingredients are listed or exempt.

China - IECSC

All the ingredients are listed or exempt.

Philippines – PICCS

All the ingredients are listed or exempt.

New Zealand - NZIOC

All the ingredients are listed or exempt.

SECTION 16: Other information

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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.

Revision comments

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

Revision date

18/05/2020

Version number

5.000

Supersedes date

23/12/2019

SDS number

15200

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SDS status	Approved.
Hazard statements in full	H315 Causes skin irritation. H319 Causes serious eye irritation.
Signature	Lisa Bland



Exposure scenario Use as an intermediate

Identification

Product name	DODECAMETHYLCYCLOHEXASILOXANE
REACH registration number	01-2119517435-42-XXXX
CAS number	540-97-6
EC number	208-762-8
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. Title of exposure scenario

Main title	Use as an intermediate
Process scope	Use of substance as an intermediate (not related to Strictly Controlled Conditions). Includes recycling/recovery, material transfers, storage, sampling, associated laboratory activities, maintenance and loading (including marine vessel/barge, road/rail car and bulk container).

Environment

Environmental release category	ERC6a Use of intermediate
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Worker

Process category	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4 Chemical production where opportunity for exposure arises PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities
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2. Conditions of use affecting exposure (Industrial - Environment 1)

Product characteristics

Concentration details	Covers concentrations up to 100 %.
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Amounts used

Annual amount per site: 50000 kg

Frequency and duration of use

Use as an intermediate

Continuous release.
Emission days: 10 days/year

Environmental factors not influenced by risk management measures

Dilution Receiving surface water flow: 390000 m³/day
Local freshwater dilution factor: 40

Risk management measures

STP type Onsite STP. , or: Municipal STP.
STP details Assumed onsite sewage treatment plant flow: 1300 m³/day
Assumed domestic sewage treatment plant flow: 1300 m³/day

Technical onsite conditions and measures to reduce or limit discharges to air, water and soil

Air Exhaust air scrubber.
Water Central biological waste water treatment No discharge of substance into waste water.
Soil Not applicable - no direct release to soil.

Conditions and measures related to external treatment of waste for disposal

Sludge treatment Sewage sludge incineration. , or: Landfill.
Waste treatment All contaminated waste water must be processed in an industrial or municipal wastewater treatment plant that incorporates both primary and secondary treatments.

2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state Liquid
Vapour pressure Vapour pressure < 0.5 kPa at STP.
Concentration details Covers concentrations up to 100 %.

Amounts used

Daily amount per site: 5000 kg

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Other given operational conditions affecting workers exposure

Setting Indoor.

Technical conditions and measures at process level (source) to prevent release

Technical protective measures Control any potential exposure using measures such as contained or enclosed systems, properly designed and maintained facilities and a good standard of general ventilation. Drain down systems and clear transfer lines prior to breaking containment. Drain down and flush equipment where possible prior to maintenance. Where there is potential for exposure: Ensure relevant staff are informed of the nature of exposure and aware of basic actions to minimise exposures; Ensure suitable personal protective equipment is available; Clear up spills and dispose of waste in accordance with regulatory requirements; monitor effectiveness of control measures; consider the need for health surveillance; identify and implement corrective actions. Locate bulk storage outdoors.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Ensure operatives are trained to minimise exposures. Ensure control measures are regularly inspected and maintained. Ensure a permit to work system is in place.

Use as an intermediate

Risk management measures

Use suitable eye protection.
Prolonged or repeated contact:
Wear suitable respiratory protection.

3. Exposure estimation (Environment 1)

Assessment method	Used EUSES model.
Environmental exposure	freshwater sediment: Exposure 0.469 mg/kg, PNEC 2.826 mg/kg, RCR 0.166 marine sediment: Exposure 0.15 mg/kg, PNEC 0.282 mg/kg, RCR 0.531 Soil: Exposure 0.0000166 mg/kg, PNEC 3.336 mg/kg, RCR <0.01

4. Guidance to check compliance with the exposure scenario (Environment 1)

ECHA guidance for downstream users

3. Exposure estimation (Health 1)

Assessment method	ECETOC TRA v2.0 Worker
Exposure	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions Worker - inhalation, long-term - systemic: Exposure 0.185 mg/m³, DNEL 11 mg/m³, RCR 0.017 Worker - inhalation, long-term - local: Exposure 0.185 mg/m³, DNEL 1.22 mg/m³, RCR 0.152 Worker - inhalation, short-term - local: Exposure 0.742 mg/m³, DNEL 6.1 mg/m³, RCR 0.122 PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions Worker - inhalation, long-term - systemic: Exposure 0.779 mg/m³, DNEL 11 mg/m³, RCR 0.071 Worker - inhalation, long-term - local: Exposure 0.779 mg/m³, DNEL 1.22 mg/m³, RCR 0.638 Worker - inhalation, short-term - local: Exposure 0.519 mg/m³, DNEL 6.1 mg/m³, RCR 0.085 PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition Worker - inhalation, long-term - systemic: Exposure 0.779 mg/m³, DNEL 11 mg/m³, RCR 0.071 Worker - inhalation, long-term - local: Exposure 0.779 mg/m³, DNEL 1.22 mg/m³, RCR 0.638 Worker - inhalation, short-term - local: Exposure 1.557 mg/m³, DNEL 6.1 mg/m³, RCR 0.255 PROC4 Chemical production where opportunity for exposure arises Worker - inhalation, long-term - systemic: Exposure 0.649 mg/m³, DNEL 11 mg/m³, RCR 0.059 Worker - inhalation, long-term - local: Exposure 0.649 mg/m³, DNEL 1.22 mg/m³, RCR 0.532 Worker - inhalation, short-term - local: Exposure 2.595 mg/m³, DNEL 6.1 mg/m³, RCR 0.426 PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities Worker - inhalation, long-term - systemic: Exposure 0.649 mg/m³, DNEL 11 mg/m³, RCR 0.059 Worker - inhalation, long-term - local: Exposure 0.649 mg/m³, DNEL 1.22 mg/m³, RCR 0.532 Worker - inhalation, short-term - local: Exposure 1.298 mg/m³, DNEL 6.1 mg/m³, RCR 0.213

4. Guidance to check compliance with the exposure scenario (Health 1)

ECHA guidance for downstream users Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.