

This safety data sheet was created pursuant to the requirements of:
UK REACH Regulations (SI 2019/758 as amended)

Supersedes date 20-May-2022

Revision date 21-Apr-2024

Revision Number 4

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

1.1. Product identifier

Product Code(s) 51676

Safety data sheet number 51676

Product Name XIAMETER OFX 5324 FLUID

Substance Name Dimethyl Siloxanes and Silicones, 3-Hydroxypropyl Methyl, Ethoxylated

CAS No 68937-54-2

Pure substance/mixture Substance

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

Recommended use Surface active agents 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
GBR

For further information, please contact

E-mail address SDS.EMEA@univarsolutions.com

Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

1.4. Emergency telephone number

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Chronic aquatic toxicity	Category 2 - (H411)
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2.2. Label elements

**Hazard statements**

H411 - Toxic to aquatic life with long lasting effects

Precautionary statements

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P234 - Keep only in original packaging

P273 - Avoid release to the environment

P391 - Collect spillage

P403 - Store in a well-ventilated place

P501 - Dispose of contents/ container to an approved waste disposal plant

2.3. Other hazards

Some hydrogen gas may be released. Hydrogen is flammable and can form explosive mixtures with air. Avoid contact with: Water. Alcohols. Acidic. Bases. Oxidising Agent.

SECTION 3: Composition/information on ingredients**3.1 Substances**

Chemical name	Weight-%	EC No (EU Index No)	UK REACH registration number	Classification according to GB CLP (SI 2020/1567 as amended)	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
DIMETHYL METHYL(PROPYL) POLY(EO(HYDROXY) SILOXANE, TRIMETHYL SILOXY TERM 68937-54-2	90 - 100%	-	-	-	-	-	-
POLYETHYLENE GLYCOL 25322-68-3	>= 3.0 - <= 5.0 %	500-038-2	-	-	-	-	-
DECAMETHYLCYCLOPENTASILOXANE 541-02-6	>= 0.33 - <= 0.67 %	208-764-9	01-3283125615-4-XXX X	-	-	-	-
OCTAMETHYLCYCLOTETRAASILOXANE 556-67-2	>= 0.36 - <= 0.45 %	209-136-7 (014-018-00 -1)	-	Flam. Liq. 3 (H226) Aquatic Chronic 1 (H410) Repr. 2 (H361f)	-	-	10
DODECAMETHYLCYCLOHEXASILOXANE 540-97-6	>= 0.17 - <= 0.25 %	208-762-8	-	-	-	-	-

Full text of H- and EUH-phrases: see section 16

Chemical name	CAS No	SVHC candidates
DECAMETHYLCYCLOPENTASILOXANE	541-02-6	X
OCTAMETHYLCYCLOTETRAASILOXANE	556-67-2	X
DODECAMETHYLCYCLOHEXASILOXANE	540-97-6	X

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Use personal protection recommended in Section 8.
Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Get medical attention if symptoms occur.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if symptoms occur.
Skin contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if symptoms occur.
Ingestion	Rinse mouth thoroughly with water. Do NOT induce vomiting. Get medical attention if symptoms occur.

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

Eyes	May cause temporary eye irritation.
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4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Alcohol resistant foam. Carbon dioxide (CO2). Water spray.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams. Dry chemical.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	When heated and in case of fire, toxic vapours/gases may be formed. Applying foam will release significant amounts of hydrogen gas that can be trapped under the foam blanket.
Hazardous combustion products	Carbon oxides. Silicon oxides. Formaldehyde. Aldehydes. Alcohols. Ether. Organic Acids.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protection recommended in Section 8. Avoid contact with skin, eyes and inhalation of vapours.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Take up mechanically, placing in appropriate containers for disposal. Some hydrogen gas may be released. Hydrogen is flammable and can form explosive mixtures with air. Avoid contact with: Water. Acidic. Bases. Alcohols. Oxidising Agent.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation. Use personal protection recommended in Section 8. Avoid contact with skin, eyes and inhalation of vapours. Do not swallow. Protect from moisture. Water. Avoid spilling. Avoid release to the environment. Handle in accordance with good industrial hygiene and safety practice. Empty containers retain product residue and can be hazardous.

General hygiene considerations Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep in properly labelled containers. Store locked up. Store away from the following materials. Strong oxidising agents. Strong acids. Strong bases. Product may evolve minute quantities of flammable hydrogen gas which can accumulate. Do not repackage. Closed containers can burst violently when heated, due to excess pressure build-up.

7.3. Specific end use(s)

Specific use(s)

See section 1 for more information.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Exposure Limits**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
POLYETHYLENE GLYCOL 25322-68-3		112 mg/kg bw/day [4] [6]	40.2 mg/m ³ [4] [6]
DECAMETHYLCYCLOPENTASILOXANE 541-02-6			97.3 mg/m ³ [4] [6] 24.2 mg/m ³ [5] [6]
OCTAMETHYLCYCLOTETRAHILOXANE 556-67-2			73 mg/m ³ [4] [6] 73 mg/m ³ [5] [6]
DODECAMETHYLCYCLOHEXASILOXANE 540-97-6			11 mg/m ³ [4] [6] 1.22 mg/m ³ [5] [6] 6.1 mg/m ³ [5] [7]

- [4] Systemic health effects.
 [5] Local health effects.
 [6] Long term.
 [7] Short term.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
POLYETHYLENE GLYCOL 25322-68-3	40 mg/kg bw/day [4] [6]		7.14 mg/m ³ [4] [6]
DECAMETHYLCYCLOPENTASILOXANE 541-02-6	5 mg/kg bw/day [4] [6]		17.3 mg/m ³ [4] [6] 4.3 mg/m ³ [5] [6]
OCTAMETHYLCYCLOTETRAHILOXANE 556-67-2	3.7 mg/kg bw/day [4] [6]		13 mg/m ³ [4] [6] 13 mg/m ³ [5] [6]
DODECAMETHYLCYCLOHEXASILOXANE 540-97-6	1.7 mg/kg bw/day [4] [6] 1.7 mg/kg bw/day [4] [7]		2.7 mg/m ³ [4] [6] 0.3 mg/m ³ [5] [6] 1.5 mg/m ³ [5] [7]

- [4] Systemic health effects.
 [5] Local health effects.
 [6] Long term.

[7] Short term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
POLYETHYLENE GLYCOL 25322-68-3	0.273 g/L	1 mg/L	27.3 mg/L	0.1 mg/L	
DECAMETHYLCYCLOPE NTASILOXANE 541-02-6	>0.0012 mg/l		>0.00012 mg/l		
OCTAMETHYLCYCLOTE TRASILOXANE 556-67-2	0.0015 mg/L		0.00015 mg/L		

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
POLYETHYLENE GLYCOL 25322-68-3	1030 mg/kg sediment dw	103 mg/kg sediment dw		46.4 mg/kg soil dw	
DECAMETHYLCYCLOPE NTASILOXANE 541-02-6	11 mg/kg sediment dw	1.1 mg/kg sediment dw	10 mg/L	2.54 mg/kg soil dw	16 mg/kg food
OCTAMETHYLCYCLOTE TRASILOXANE 556-67-2	3 mg/kg sediment dw	0.3 mg/kg sediment dw	10 mg/L	0.54 mg/kg soil dw	41 mg/kg food
DODECAMETHYLCYCLO HEXASILOXANE 540-97-6	13 mg/kg sediment dw	1.3 mg/kg sediment dw			66.7 mg/kg food

8.2. Exposure controls

Engineering controls No information available.

Personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Use eye protection according to EN 166.

Hand protection Wear suitable gloves. Gloves must conform to standard EN 374.

Gloves			
Duration of contact	PPE - Glove material	Glove thickness	Break through time
	Wear protective butyl rubber gloves	> 0.35 mm	> 120 minutes
	Ethyl vinyl alcohol laminate ("EVAL")	> 0.35 mm	> 120 minutes
	Wear protective Neoprene™ gloves	> 0.35 mm	> 120 minutes
	Wear protective nitrile rubber gloves	> 0.35 mm	> 120 minutes
	Polyvinyl chloride (PVC)	> 0.35 mm	> 120 minutes
	Wear protective Viton™	> 0.35 mm	> 120 minutes

	gloves		
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Skin and body protection Wear appropriate clothing to prevent reasonably probable skin contact.

Respiratory protection Use appropriate respiratory protection.
Organic gases and vapours filter conforming to EN 14387. Type AP2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Liquid
Colour	Amber
Odour	Characteristic.
Odour threshold	No information available

Property	Values	Remarks • Method
Melting point / freezing point		Not determined.
Initial boiling point and boiling range	> 150 °C	@ 760 mmHg.
Flammability		No information available.
Flammability Limit in Air		No information available.
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point	103 °C	Pensky-Martens closed cup.
Autoignition temperature		No information available.
Decomposition temperature		No information available.
pH		No information available.
pH (as aqueous solution)		No information available.
Kinematic viscosity	350 mm ² /s	@ 25 °C.
Dynamic viscosity		No information available.
Water solubility		Not determined.
Solubility(ies)		No information available.
Partition coefficient		Not determined.
Vapour pressure		No information available.
Relative density	1.04	
Bulk density		No information available
Liquid Density	No information available	No information available
Relative vapour density		No information available.
Particle characteristics		Not applicable.
Particle Size	No information available	
Particle Size Distribution	No information available	
Explosive properties	Not considered to be explosive.	
Oxidising properties	Does not meet the criteria for classification as oxidising	

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No known effects under normal use conditions.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions The following materials may react with the product.: Strong oxidising agents. Some hydrogen gas may be released. Hydrogen is flammable and can form explosive mixtures with air. Avoid contact with:.. Water. Alcohols. Acidic. Bases. Oxidising Agent. Metals. Hazardous decomposition products will be formed at elevated temperatures.

10.4. Conditions to avoid

Conditions to avoid Protect from moisture.

10.5. Incompatible materials

Incompatible materials Strong oxidising agents. Strong acids. Strong bases.

10.6. Hazardous decomposition products

Hazardous decomposition products Silicon oxides. Formaldehyde. Aldehydes. Alcohols. Ether. Organic Acids.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

Inhalation Inhalation of vapours in high concentration may cause irritation of respiratory system.

Eye contact May cause temporary eye irritation.

Skin contact May cause slight skin irritation. Redness.

Ingestion May cause discomfort if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

> 5000 mg/kg > 2000 mg/kg

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
POLYETHYLENE GLYCOL	> 10000 mg/kg (Rat)	> 10000 mg/kg (Rat)	> 2.5 mg/l (Rat) (6h)
DECAMETHYLCYCLOPENTAS ILOXANE	> 24134 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 8.67 mg/L (Rat) 4 h
OCTAMETHYLCYCLOTETRAS ILOXANE	> 4800 mg/kg (Rat)	> 2400 mg/kg (Rat)	= 36 mg/L (Rat) 4 h

DODECAMETHYLCYCLOHEXASILOXANE	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation May cause slight skin irritation. Redness.

DIMETHYL METHYL(PROPYL(POLY(EO(HYDROXY) SILOXANE, TRIMETHYL SILOXY TERM (68937-54-2)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					May cause slight irritation Redness

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Non-irritating during normal use

DECAMETHYLCYCLOPENTASILOXANE (541-02-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Non-irritating during normal use

OCTAMETHYLCYCLOTETRAASILOXANE (556-67-2)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Non-irritating during normal use

DODECAMETHYLCYCLOHEXASILOXANE (540-97-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Non-irritating during normal use

Serious eye damage/eye irritation May cause temporary eye irritation.

DIMETHYL METHYL(PROPYL(POLY(EO(HYDROXY) SILOXANE, TRIMETHYL SILOXY TERM (68937-54-2)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					May cause temporary eye irritation

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					May cause temporary eye irritation

DECAMETHYLCYCLOPENTASILOXANE (541-02-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					non-irritant

OCTAMETHYLCYCLOTETRAASILOXANE (556-67-2)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					non-irritant

DODECAMETHYLCYCLOHEXASILOXANE (540-97-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
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					May cause temporary eye irritation
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Respiratory or skin sensitisation Non-sensitizing.

DIMETHYL METHYL(PROPYL(POLY(EO(HYDROXY) SILOXANE, TRIMETHYL SILOXY TERM (68937-54-2)

Method	Species	Exposure route	Results
	Guinea pig	Dermal	Not a skin sensitiser

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Exposure route	Results
	Guinea pig	Dermal	Not a skin sensitiser
	Human evidence	Dermal	Negative

DECAMETHYLCYCLOPENTASILOXANE (541-02-6)

Method	Species	Exposure route	Results
	Mouse	Dermal	Not a skin sensitiser

OCTAMETHYLCYCLOTETRASILOXANE (556-67-2)

Method	Species	Exposure route	Results
	Guinea pig	Dermal	Not a skin sensitiser

DODECAMETHYLCYCLOHEXASILOXANE (540-97-6)

Method	Species	Exposure route	Results
	Guinea pig	Dermal	Not a skin sensitiser

Germ cell mutagenicity Did not show mutagenic effects in animal experiments.

Component Information

DIMETHYL METHYL(PROPYL(POLY(EO(HYDROXY) SILOXANE, TRIMETHYL SILOXY TERM (68937-54-2)

Method	Species	Results
	Ames Test	Negative

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Results
	in vitro	Negative
		Negative Did not show mutagenic effects in animal experiments

DECAMETHYLCYCLOPENTASILOXANE (541-02-6)

Method	Species	Results
	in vitro	Negative
		Did not show mutagenic effects in animal experiments

OCTAMETHYLCYCLOTETRASILOXANE (556-67-2)

Method	Species	Results
	in vitro	Negative
		Did not show mutagenic effects in animal experiments

DODECAMETHYLCYCLOHEXASILOXANE (540-97-6)

Method	Species	Results
	in vitro	Negative
		Did not show mutagenic effects in animal experiments

Carcinogenicity No information available.

Component Information
POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Results
		Did not cause cancer in laboratory animals.

DECAMETHYLCYCLOPENTASILOXANE (541-02-6)

Method	Species	Results
		Results from a 2 year repeated vapour inhalation exposure study to rats of decamethylcyclotetrasiloxane (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.

OCTAMETHYLCYCLOTETRAILOXANE (556-67-2)

Method	Species	Results
		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.

DODECAMETHYLCYCLOHEXASILOXANE (540-97-6)

Method	Species	Results
		Did not cause cancer in laboratory animals.

Reproductive toxicity No information available.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

Chemical name	United Kingdom
OCTAMETHYLCYCLOTETRAILOXANE	Repr. 2

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Results
		This product does not contain any known or suspected reproductive hazards

DECAMETHYLCYCLOPENTASILOXANE (541-02-6)

Method	Species	Results
		This product does not contain any known or suspected reproductive hazards

OCTAMETHYLCYCLOTETRAASILOXANE (556-67-2)

Method	Species	Results
		Suspected of damaging fertility

DODECAMETHYLCYCLOHEXASILOXANE (540-97-6)

Method	Species	Results
		This product does not contain any known or suspected reproductive hazards

STOT - single exposure

No information available.

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Based on available data, a STOT-RE classification is not warranted.

DECAMETHYLCYCLOPENTASILOXANE (541-02-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Based on available data, a STOT-RE classification is not warranted.

OCTAMETHYLCYCLOTETRAASILOXANE (556-67-2)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					In animals, effects have been reported on the following organs: Kidney Liver respiratory tract Female reproductive organs

DODECAMETHYLCYCLOHEXASILOXANE (540-97-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Based on available data, a STOT-RE classification is not warranted.

STOT - repeated exposure

No information available.

DIMETHYL METHYL(PROPYL(POLY(EO(HYDROXY) SILOXANE, TRIMETHYL SILOXY TERM (68937-54-2)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Based on available data, specific target organ toxicity is not expected after single oral, single inhalation, or single dermal exposure.

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Based on available data, specific target organ toxicity is not expected after single oral, single inhalation, or single dermal exposure.

DECAMETHYLCYCLOPENTASILOXANE (541-02-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Not classified Based on available data, specific target organ toxicity is not expected after single oral, single inhalation, or single dermal exposure.

OCTAMETHYLCYCLOTETRASILOXANE (556-67-2)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Not classified Based on available data, specific target organ toxicity is not expected after single oral, single inhalation, or single dermal exposure.

DODECAMETHYLCYCLOHEXASILOXANE (540-97-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Not classified Based on available data, specific target organ toxicity is not expected after single oral, single inhalation, or single dermal exposure.

Aspiration hazard

Based on available data the classification criteria are not met.

Other adverse effects

No information available.

SECTION 12: Ecological information

12.1. Toxicity**Ecotoxicity**

Toxic to aquatic life with long lasting effects.

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
	Pimephales promelas	LC50	58900 mg/L	96 hours	
	Daphnia magna	EC50	22100 mg/L	48 hours	
	Bacteria toxicity	EC50	> 10000 mg/L	16 hours	

DECAMETHYLCYCLOPENTASILOXANE (541-02-6)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 204: Fish, Prolonged Toxicity Test: 14-Day Study	Oncorhynchus mykiss (rainbow trout)	LC50	> 16 µg/l	96 hours	
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test	Daphnia magna	EC50	> 2.9 mg/L	48 hours	
	Pseudokirchneriella subcapitata	ErC50	> 0.012 mg/L	96 hours	
	Pseudokirchneriella subcapitata	NOEC	0.012 mg/L	96 hours	
Chronic aquatic toxicity	Oncorhynchus mykiss (rainbow trout)	LC50	> 16 mg/L	14 days	
Chronic aquatic toxicity	Oncorhynchus mykiss (rainbow trout)	NOEC	>= 0.017 mg/L	45 days	
Chronic aquatic toxicity	Oncorhynchus mykiss (rainbow trout)	NOEC	>= 0.014 mg/L	90 days	
Chronic aquatic toxicity	Daphnia magna	NOEC	0.015 mg/L	21 days	
	Eisenia fetida	NOEC	>= 76 mg/kg		

OCTAMETHYLCYCLOTETRAILOXANE (556-67-2)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
	Oncorhynchus mykiss (rainbow trout)	LC50	> 0.022 mg/L	96 hours	
	Cyprinodon variegatus	LC50	> 0.0063 mg/L	14 days	
	Mysidopsis bahia	EC50	> 0.0091 mg/L	96 hours	
	Daphnia magna	EC50	> 0.015 mg/L	48 hours	
	Pseudokirchneriella subcapitata	ErC50	> 0.022 mg/L	96 hours	
	Pseudokirchneriella subcapitata	EC10	>= 0.022 mg/L	96 hours	
Chronic aquatic toxicity	Oncorhynchus mykiss (rainbow trout)	NOEC	>= 0.0044 mg/L	93 days	
Chronic aquatic toxicity	Daphnia magna	NOEC	0.0079 mg/L	21 days	

DODECAMETHYLCYCLOHEXASILOXANE (540-97-6)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
	Pseudokirchneriella subcapitata	ErC50	> 0.002 mg/L	72 hours	
Chronic aquatic toxicity	Daphnia magna	NOEC	0.0046 mg/L	21 days	

12.2. Persistence and degradability**Persistence and degradability** No information available.**POLYETHYLENE GLYCOL (25322-68-3)**

Method	Exposure time	Value	Results
OECD Test No. 301B: Ready Biodegradability: CO2 Evolution Test (TG 301 B)	28 days	Biodegradation 90 %	Readily biodegradable

DECAMETHYLCYCLOPENTASILOXANE (541-02-6)

Method	Exposure time	Value	Results
OECD 310	28 days	Biodegradation 0.14%	Expected to biodegrade very slowly

OCTAMETHYLCYCLOTETRASILOXANE (556-67-2)

Method	Exposure time	Value	Results
OECD 310	28 days	Biodegradation 3.7%	Expected to biodegrade very slowly

DODECAMETHYLCYCLOHEXASILOXANE (540-97-6)

Method	Exposure time	Value	Results
OECD Test No. 301B: Ready Biodegradability: CO2 Evolution Test (TG 301 B)	28 days	Biodegradation 4.5%	Not readily biodegradable

12.3. Bioaccumulative potential**Bioaccumulation** There is no data for this product.**Component Information**

Chemical name	Partition coefficient
DECAMETHYLCYCLOPENTASILOXANE	5.2
OCTAMETHYLCYCLOTETRASILOXANE	6.49
DODECAMETHYLCYCLOHEXASILOXANE	8.87

12.4. Mobility in soil**Mobility in soil** No information available.**12.5. Results of PBT and vPvB assessment****PBT and vPvB assessment** The product contains substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
POLYETHYLENE GLYCOL	The substance is not PBT / vPvB
DECAMETHYLCYCLOPENTASILOXANE	PBT substance vPvB substance
OCTAMETHYLCYCLOTETRASILOXANE	PBT substance vPvB substance
DODECAMETHYLCYCLOHEXASILOXANE	vPvB substance

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

SECTION 14: Transport information**IATA**

14.1 UN number or ID number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (OCTAMETHYLCYCLOTETRASILOXANE)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	A97, A158, A197
ERG Code	9L

IMDG

14.1 UN number or ID number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (OCTAMETHYLCYCLOTETRASILOXANE)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274, 335, 969
EmS-No	F-A, S-F
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number or ID number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (OCTAMETHYLCYCLOTETRASILOXANE)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274, 335, 375, 601
Classification code	M6

ADR

14.1 UN number or ID number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (OCTAMETHYLCYCLOTETRASILOXANE)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274, 335, 601, 375
Classification code	M6
Tunnel restriction code	(-)

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**National regulations****Authorisations and/or restrictions on use:**

This product contains one or more substances subject to restriction (UK REACH - Annex XVII).

This product does not contain substances subject to authorisation (UK REACH - Annex XIV).

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
DECAMETHYLCYCLOPENTASILOXANE - 541-02-6	Use restricted. See item 70.	-
OCTAMETHYLCYCLOTETRAILOXANE - 556-67-2	Use restricted. See item 70.	-

Persistent Organic Pollutants

Not applicable

Export Notification requirements

Not applicable

Dangerous substance category per COMAH Regulations 2015 (as amended)

E2 - Hazardous to the Aquatic Environment in Category Chronic 2

Named dangerous substances per COMAH Regulations 2015 (as amended)

Not applicable

The Ozone-Depleting Substances Regulations 2015

Not applicable

The Biocidal Products Regulations 2001 (as amended)

Not applicable

The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)

Not applicable

Poisons Act 1972 (Explosive Precursors) Regulations (as Amended)

Not applicable

International Inventories

TSCA	Contact supplier for inventory compliance status
DSL/NDL	Contact supplier for inventory compliance status
EINECS/ELINCS	Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status
KECI	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AIIC	Contact supplier for inventory compliance status
NZIoC	Contact supplier for inventory compliance status

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AIIC - Australian Inventory of Industrial Chemicals

NZIoC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

H226 - Flammable liquid and vapour

H361f - Suspected of damaging fertility

H410 - Very toxic to aquatic life with long lasting effects

Legend

SVHC: Substances of Very High Concern for Authorisation:

PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances

vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitisers		

Revision Note [SDS sections updated 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16](#)

Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)

European Chemicals Agency (ECHA) (ECHA_API)

Environmental Protection Agency

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
Organisation for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Prepared By Lisa Bland
Supersedes date 20-May-2022
Revision date 21-Apr-2024

This material safety data sheet complies with the requirements of UK REACH Regulations (SI 2019/758 as amended)
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.

End of Safety Data Sheet