

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

Supersedes date 13-Mar-2024

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Revision Number 10

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

1.1. Product identifier

Product Code(s) 11258
Safety data sheet number 11258
Product Name DOWSIL 11 ADDITIVE
Synonyms DC 11 ADDITIVE, DOW CORNING 11 ADDITIVE
Pure substance/mixture Mixture
Contains TOLUENE

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

Recommended use Formulation & (re)packing of substances and mixtures.
Industrial use
Professional use
Consumer use
Coatings
Ink and toners
Solvent-based process

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

Flammable liquids	Category 2 - (H225)
Skin corrosion/irritation	Category 2 - (H315)
Reproductive toxicity	Category 2 - (H361)
Specific target organ toxicity — single exposure	Category 3 - (H336)
Category 3 Narcotic effects	
Specific target organ toxicity — repeated exposure	Category 2 - (H373)
Aspiration hazard	Category 1 - (H304)
Chronic aquatic toxicity	Category 3 - (H412)

2.2. Label elements

Contains TOLUENE



Signal word

Danger

Hazard statements

H304 - May be fatal if swallowed and enters airways

H315 - Causes skin irritation

H336 - May cause drowsiness or dizziness

H361d - Suspected of damaging the unborn child

H373 - May cause damage to organs through prolonged or repeated exposure

H412 - Harmful to aquatic life with long lasting effects

H225 - Highly flammable liquid and vapour

Precautionary statements

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

P260 - Do not breathe dust/fume/gas/mist/vapours/spray

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor

P331 - Do NOT induce vomiting

P370 + P378 - In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish

Unknown aquatic toxicity

Contains 0 % of components with unknown hazards to the aquatic environment.

Additional information

This product requires child resistant fastenings if supplied to the general public. This product requires tactile warnings if supplied to the general public.

2.3. Other hazards

Product is a static accumulator.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

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)
TOLUENE 108-88-3	>= 84.0 - <= 94.0 %	203-625-9 (601-021-00-3)	01-8199965928-7-XXX X	Aquatic Chronic 3 (H412) Asp. Tox. 1 (H304) STOT RE 2 (H373) Repr. 2 (H361d) Skin Irrit. 2 (H315) STOT SE 3 (H336) Flam. Liq. 2 (H225)	-	-	-
DECAMETHYLCYCLOPENTASILOXANE 541-02-6	>= 0.06 - <= 0.23 %	208-764-9	01-3283125615-4-XXX X	Not Classified	-	-	-
DODECAMETHYLCYCLOHEXASILOXANE 540-97-6	>= 0.05 - <= 0.16 %	208-762-8	-	Not Classified	-	-	-
OCTAMETHYLCYCLOTETRAHILOXANE 556-67-2	>= 0.07 - <= 0.16 %	209-136-7 (014-018-00-1)	-	Flam. Liq. 3 (H226) Aquatic Chronic 1 (H410) Repr. 2 (H361f)	-	-	10

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

Chemical name	CAS No	SVHC candidates
DECAMETHYLCYCLOPENTASILOXANE	541-02-6	X
DODECAMETHYLCYCLOHEXASILOXANE	540-97-6	X

SECTION 4: First aid measures**4.1. Description of first aid measures****General advice**

First aid personnel should wear appropriate protective equipment during any rescue. 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. If breathing is irregular or stopped, administer artificial respiration. 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

Symptoms	Suspected of damaging the unborn child. May cause damage to organs through prolonged or repeated exposure.
Inhalation	May cause drowsiness or dizziness.
Dermal	Causes skin irritation.
Ingestion	May be fatal if swallowed and enters airways

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

Note to doctors	Maintain adequate ventilation and oxygenation of the patient. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. The decision of whether to induce vomiting or not should be made by a physician. Alcohol consumed before or after exposure may increase adverse effects. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Skin contact may aggravate preexisting dermatitis.
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SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable Extinguishing Media	Alcohol resistant foam. Carbon dioxide (CO ₂). Dry chemical. Dry sand.
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.

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. Flash back possible over considerable distance. Flammable concentrations of vapour can accumulate at temperatures above flash point; see Section 9. Flammable mixtures may exist within the vapour space of containers at room temperature. Closed containers can burst violently when heated, due to excess pressure build-up. Vapours may form explosive mixtures with air.
Hazardous combustion products	Carbon oxides. Silicon oxides. Formaldehyde.

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.
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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. Remove all sources of ignition. Eliminate all sources of ignition in vicinity of spill or released vapor to avoid fire or explosion. Ground and bond container and receiving equipment. Vapours may form explosive mixtures with air. Do not allow run-off from fire-fighting to enter drains or water courses. Follow precautions for safe handling described in this safety data sheet.
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Other information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

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 Use non-sparking tools. Suppress (knock down) gases/vapours/mists with a water spray jet. 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.

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. Keep container closed when not in use. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Avoid spilling. Avoid release to the environment. Use non-sparking tools. Handle in accordance with good industrial hygiene and safety practice. Empty containers retain product residue and can be hazardous. Use explosion-proof electrical, ventilating and lighting equipment. Ensure all equipment is electrically grounded before beginning transfer operations. This material can accumulate static charge due to its inherent physical properties and can therefore cause an electrical ignition source to vapors. In order to prevent a fire hazard, as bonding and grounding may be insufficient to remove static electricity, it is necessary to provide an inert gas purge before beginning transfer operations. Restrict flow velocity in order to reduce the accumulation of static electricity. Ground and bond container and receiving equipment.

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. Keep away from open flames, hot surfaces and sources of ignition. Store away from the following materials. Strong oxidising agents. Organic peroxide. Flammable solid. Pyrophoric liquids. Pyrophoric solids. Self-heating substances and mixtures. Substances and mixtures, which in contact with water, emit flammable gases. Explosives. Gases.

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

Chemical name	United Kingdom
TOLUENE 108-88-3	TWA: 50 ppm TWA: 191 mg/m ³ STEL: 100 ppm STEL: 384 mg/m ³ Sk*

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
TOLUENE 108-88-3		384 mg/kg bw/day [4] [6]	192 mg/m ³ [4] [6] 384 mg/m ³ [4] [7] 192 mg/m ³ [5] [6] 384 mg/m ³ [5] [7]
DECAMETHYLCYCLOPENTASILOXANE 541-02-6			97.3 mg/m ³ [4] [6] 24.2 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]
OCTAMETHYLCYCLOTETRASILOXANE 556-67-2			73 mg/m ³ [4] [6] 73 mg/m ³ [5] [6]

[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
TOLUENE 108-88-3	8.13 mg/kg bw/day [4] [6]		56.5 mg/m ³ [4] [6] 226 mg/m ³ [4] [7] 56.5 mg/m ³ [5] [6] 226 mg/m ³ [5] [7]
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]
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]
OCTAMETHYLCYCLOTETRASILOXANE	3.7 mg/kg bw/day [4] [6]		13 mg/m ³ [4] [6] 13 mg/m ³ [5] [6]

Chemical name	Oral	Dermal	Inhalation
556-67-2			

[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
TOLUENE 108-88-3	0.68 mg/L	0.68 mg/L	0.68 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
TOLUENE 108-88-3	16.39 mg/kg sediment dw	16.39 mg/kg sediment dw	13.61 mg/L	2.89 mg/kg soil dw	
DECAMETHYLCYCLOPE NTASILOXANE 541-02-6	2.4 mg/kg	0.24 mg/kg	> 10 mg/l	1.1 mg/kg	16 mg/kg food
DODECAMETHYLCYCLO HEXASILOXANE 540-97-6	13 mg/kg sediment dw	1.3 mg/kg sediment dw	1 mg/L		66.7 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

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
	Chlorinated polyethylene (CPE)	> 0.35 mm	> 120 minutes
	Polyethylene (PE)	> 0.35 mm	> 120 minutes
	Ethyl vinyl alcohol laminate	> 0.35 mm	> 120 minutes

	("EVAL")		
	Wear protective Neoprene™ gloves	> 0.35 mm	> 120 minutes
	Nitrile/butadiene rubber ("nitrile" or "NBR").	> 0.35 mm	> 120 minutes
	Polyvinyl alcohol (PVA)	> 0.35 mm	> 120 minutes
	Polyvinyl chloride (PVC)	> 0.35 mm	> 120 minutes
	Wear protective Viton™ gloves	> 0.35 mm	> 120 minutes

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

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Liquid
Colour	Colourless To light yellow
Odour	Solvent.
Odour threshold	No information available

Property	Values	Remarks • Method
Melting point / freezing point		Not determined.
Initial boiling point and boiling range	110 °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	4 °C	Tag Closed Cup.
Autoignition temperature		No information available.
Decomposition temperature		No information available.
pH		Not applicable. Substance/mixture is non-polar/aprotic.
pH (as aqueous solution)		No information available.
Kinematic viscosity	1.5 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	0.875	
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 Yes.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions The following materials may react with the product.: Strong oxidising agents. Vapours may form explosive mixtures with air. Highly flammable liquid and vapour.

10.4. Conditions to avoid

Conditions to avoid Heat, flames and sparks. Avoid static discharge.

10.5. Incompatible materials

Incompatible materials Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Carbon oxides. Silicon oxides. Formaldehyde.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

Inhalation May cause drowsiness or dizziness.

Eye contact May cause temporary eye irritation.

Skin contact Causes skin irritation.

Ingestion May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Suspected of damaging the unborn child. May cause damage to organs through prolonged or repeated exposure.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

Oral LD50

Oral LD50 > 5000 mg/kg

Dermal LD50

Dermal LD50 > 5000 mg/kg

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
TOLUENE	> 5000 mg/kg (Rat)	12267 mg/kg (Rabbit)	25.7 mg/l (Rat) 4h
DECAMETHYLCYCLOPENTASILOXANE	> 24134 mg/kg (Rat)	> 2000 (Rabbit)	8.67 mg/l (Rat) 4h
DODECAMETHYLCYCLOHEXASILOXANE	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	-
OCTAMETHYLCYCLOTETRASILOXANE	> 4800 mg/kg (Rat)	> 2400 mg/kg (Rat)	= 36 mg/L (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Skin corrosion/irritation**

Causes skin irritation. Dryness and/or cracking.

TOLUENE (108-88-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Causes skin irritation Dryness and/or cracking

DECAMETHYLCYCLOPENTASILOXANE (541-02-6)

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

OCTAMETHYLCYCLOTETRASILOXANE (556-67-2)

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

Serious eye damage/eye irritation

May cause slight eye irritation.

TOLUENE (108-88-3)

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

DECAMETHYLCYCLOPENTASILOXANE (541-02-6)

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

DODECAMETHYLCYCLOHEXASILOXANE (540-97-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					May cause slight eye irritation Corneal injury is unlikely

OCTAMETHYLCYCLOTETRASILOXANE (556-67-2)

Method	Species	Exposure route	Effective dose	Exposure time	Results
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					non-irritant
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Respiratory or skin sensitisation Not a skin sensitiser.

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

TOLUENE (108-88-3)

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

DECAMETHYLCYCLOPENTASILOXANE (541-02-6)

Method	Species	Exposure route	Results
	Mouse	Dermal	Not a skin sensitiser

DODECAMETHYLCYCLOHEXASILOXANE (540-97-6)

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

OCTAMETHYLCYCLOTETRAILOXANE (556-67-2)

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

Germ cell mutagenicity No information available.

Component Information

TOLUENE (108-88-3)

Method	Species	Results
		Not mutagenic

DECAMETHYLCYCLOPENTASILOXANE (541-02-6)

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

DODECAMETHYLCYCLOHEXASILOXANE (540-97-6)

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

OCTAMETHYLCYCLOTETRAILOXANE (556-67-2)

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

Carcinogenicity No information available.

Component Information

TOLUENE (108-88-3)

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.

OCTAMETHYLCYCLOTETRASILOXANE (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.

Reproductive toxicity

Suspected of damaging the unborn child.

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

Chemical name	United Kingdom
TOLUENE	Repr. 2
OCTAMETHYLCYCLOTETRASILOXANE	Repr. 2

TOLUENE (108-88-3)

Method	Species	Results
		Suspected of damaging the unborn child.

DECAMETHYLCYCLOPENTASILOXANE (541-02-6)

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

DODECAMETHYLCYCLOHEXASILOXANE (540-97-6)

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

OCTAMETHYLCYCLOTETRASILOXANE (556-67-2)

Method	Species	Results
		Suspected of damaging fertility

STOT - single exposure

May cause drowsiness or dizziness.

TOLUENE (108-88-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					May cause drowsiness or dizziness Central nervous system

DECAMETHYLCYCLOPENTASILOXANE (541-02-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Evaluation of available data suggests that this material is not an STOT-SE toxicant

DODECAMETHYLCYCLOHEXASILOXANE (540-97-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Evaluation of available data suggests that this material is not an STOT-SE toxicant

OCTAMETHYLCYCLOTETRASILOXANE (556-67-2)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Evaluation of available data suggests that this material is not an STOT-SE toxicant

STOT - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Component Information

TOLUENE (108-88-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					May cause damage to organs through prolonged or repeated exposure In animals, effects have been reported on the following organs: Central nervous system Excessive exposure may cause neurologic signs and symptoms. Toluene

					has caused hearing loss in laboratory animals upon exposure to high concentrations. Intentional misuse by deliberately inhaling toluene may cause nervous system damage, hearing loss, liver and kidney effects and death.
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DECAMETHYLCYCLOPENTASILOXANE (541-02-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Based on available data, repeated exposures are not anticipated to cause significant adverse effects

DODECAMETHYLCYCLOHEXASILOXANE (540-97-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Based on available data, repeated exposures are not anticipated to cause significant adverse effects

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

Aspiration hazard May be fatal if swallowed and enters airways.

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Harmful to aquatic life with long lasting effects.

Unknown aquatic toxicity Contains 0 % of components with unknown hazards to the aquatic environment.

TOLUENE (108-88-3)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 203: Fish, Acute Toxicity Test	Oncorhynchus mykiss (rainbow)	LC50	5.8 mg/L	96 hours	

	trout)				
Acute toxicity	Oncorhynchus kisutch	LC50	5.5 mg/L	96 hours	
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test	Daphnia magna	EC50	7 mg/L	24 hours	
Acute toxicity	Water flea Ceriodaphnia dubia	LC50	3.78 mg/L	48 hours	
Acute toxicity	Chlorella sp	EC50	134 mg/L	3 hours	
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test or Equivalent.	Skeletonema costatum	NOEC	10 mg/L	72 hours	
Bacteria toxicity	Nitrosomonas sp	EC50	84 mg/L	24 hours	
Chronic toxicity	Fish Oncorhynchus kisutch	NOEC	1.39 mg/L	40 days	
	Ceriodaphnia dubia	NOEC	0.74 mg/L	7 days	
	Daphnia magna	NOEC	2 mg/L	21 days	

DECAMETHYLCYCLOPENTASILOXANE (541-02-6)

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

DODECAMETHYLCYCLOHEXASILOXANE (540-97-6)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
Acute toxicity	Pseudokirchneriella subcapitata	ErC50	> 0.002 mg/L	72 days	No toxicity up to the limit of solubility

OCTAMETHYLCYCLOTETRAILOXANE (556-67-2)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
Acute toxicity	Oncorhynchus mykiss (rainbow trout)	LC50	> 0.022 mg/L	96 hours	
Acute toxicity	Cyprinodon variegatus	LC50	> 0.0063 mg/L	14 days	

Acute toxicity	Mysidopsis bahia	EC50	> 0.0091 mg/L	96 hours	
Acute toxicity	Daphnia magna	EC50	> 0.015 mg/L	48 hours	
Acute toxicity	Pseudokirchneriella subcapitata	ErC50	> 0.022 mg/L	96 hours	
Acute toxicity	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	

12.2. Persistence and degradability

Persistence and degradability No information available.

TOLUENE (108-88-3)

Method	Exposure time	Value	Results
OECD Test No. 301C: Ready Biodegradability: Modified MITI Test (I) (TG 301 C) or Equivalent.	14 days	Biodegradation 100 %	Readily biodegradable

DECAMETHYLCYCLOPENTASILOXANE (541-02-6)

Method	Exposure time	Value	Results
OECD 310	28 days	Biodegradation 0.14%	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 57%	Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

OCTAMETHYLCYCLOTETRASILOXANE (556-67-2)

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

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
TOLUENE	2.73
DECAMETHYLCYCLOPENTASILOXANE	5.2
DODECAMETHYLCYCLOHEXASILOXANE	8.87
OCTAMETHYLCYCLOTETRASILOXANE	6.49

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
TOLUENE	The substance is not PBT / vPvB PBT assessment does not apply
DECAMETHYLCYCLOPENTASILOXANE	PBT substance vPvB substance
DODECAMETHYLCYCLOHEXASILOXANE	vPvB substance
OCTAMETHYLCYCLOTETRAASILOXANE	PBT substance vPvB substance

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Waste from residues/unused products Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

SECTION 14: Transport information**IATA**

14.1 UN number or ID number	UN1294
14.2 UN proper shipping name	TOLUENE
14.3 Transport hazard class(es)	3
14.4 Packing group	II
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	None
ERG Code	3L

IMDG

14.1 UN number or ID number	UN1294
UN proper shipping name	TOLUENE
14.3 Transport hazard class(es)	3
14.4 Packing group	II
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	None
EmS-No	F-E, S-D
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number or ID number	UN1294
14.2 UN proper shipping name	TOLUENE
14.3 Transport hazard class(es)	3
14.4 Packing group	II
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	None

Classification code F1

ADR

14.1 UN number or ID number UN1294
 14.2 UN proper shipping name TOLUENE
 14.3 Transport hazard class(es) 3
 14.4 Packing group II
 14.5 Environmental hazards No
 14.6 Special precautions for user
 Special Provisions None
 Classification code F1
 Tunnel restriction code (D/E)

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
TOLUENE - 108-88-3	Use restricted. See item 48.	-
DECAMETHYLCYCLOPENTASILOXANE - 541-02-6	Use restricted. See item 70.	-
DODECAMETHYLCYCLOHEXASILOXANE - 540-97-6	Use restricted. See item 70.	-
OCTAMETHYLCYCLOTETRAASILOXANE - 556-67-2	Use restricted. See item 70. 75	-

Persistent Organic Pollutants

Not applicable

Export Notification requirements

Not applicable

Dangerous substance category per COMAH Regulations 2015 (as amended)

P5c - FLAMMABLE LIQUIDS

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/NDSL	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/NDSL - 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 Chemical Safety Assessment has been carried out for this substance/mixture

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**

H225 - Highly flammable liquid and vapour
 H304 - May be fatal if swallowed and enters airways
 H315 - Causes skin irritation
 H336 - May cause drowsiness or dizziness
 H361d - Suspected of damaging the unborn child
 H373 - May cause damage to organs through prolonged or repeated exposure
 H412 - Harmful 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 6 7 8 9 10 11 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
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

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**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