

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

Supersedes date 07-Jan-2019

Revision date 03-Dec-2024

Revision Number 4

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

1.1. Product identifier

Product Code(s) 48630
Safety data sheet number 48630
Product Name DOWSIL 18 ADDITIVE
Synonyms DOW CORNING 18 ADDITIVE
Pure substance/mixture Mixture

Contains ALCOHOLS C12 14 SECONDARY ETHOXYLATED

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

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

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

Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 1 - (H318)

2.2. Label elements

Contains ALCOHOLS C12 14 SECONDARY ETHOXYLATED

**Signal word**

Danger

Hazard statements

H315 - Causes skin irritation

H318 - Causes serious eye damage

Precautionary statements

P261 - Avoid breathing spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P271 - Use only outdoors or in a well-ventilated area

P280 - Wear protective gloves and eye/face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor

P332 + P313 - If skin irritation occurs: Get medical advice/attention

Unknown aquatic toxicity

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

2.3. Other hazards

No information available.

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)
ALCOHOLS C12 14 SECONDARY ETHOXYLATED 84133-50-6	>= 14.0 - <= 18.0 %	-	-	Acute Tox. 4 (H332) Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)	-	-	-
OCTAMETHYLCYC	>= 0.021	209-136-7	-	Flam. Liq. 3 (H226)	-	-	10

LOTETRASIOXAN E 556-67-2	- <= 0.071 %	(014-018-00 -1)		Aquatic Chronic 1 (H410) Repr. 2 (H361f)			
--------------------------------	--------------	--------------------	--	--	--	--	--

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

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (UK REACH Article 59)

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. 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 without medical advice. Get medical attention if symptoms occur.

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

Eyes	Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. Causes eye burns.
Dermal	Causes skin irritation.

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

Note to doctors	Chemical eye burns may require extended irrigation. Chemical burns must be treated promptly by a physician. Treat any burns as thermal burns, after decontamination. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Skin contact may aggravate preexisting dermatitis.
------------------------	--

SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable Extinguishing Media	Dry chemical, CO ₂ , alcohol-resistant foam or 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.

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. Exposure to combustion products may be a hazard to health.
---	--

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.

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. Follow precautions for safe handling described in this safety data sheet.

Other information 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 Prevent further leakage or spillage if safe to do so.

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.

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. 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 away from the following materials. Strong oxidising agents.

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
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.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
OCTAMETHYLCYCLOTETRASILOXANE 556-67-2	3.7 mg/kg bw/day [4] [6]		13 mg/m ³ [4] [6] 13 mg/m ³ [5] [6]

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

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
OCTAMETHYLCYCLOTE TRASILOXANE 556-67-2	0.0015 mg/L		0.00015 mg/L		

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
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
	Rubber (natural, latex)	> 0.35 mm	> 120 minutes
	Wear protective Neoprene™ gloves	> 0.35 mm	> 120 minutes
	Nitrile/butadiene rubber ("nitrile" or "NBR").	> 0.35 mm	> 120 minutes
	Polyethylene (PE)	> 0.35 mm	> 120 minutes
	Ethyl vinyl alcohol laminate ("EVAL")	> 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
	Chlorinated polyethylene (CPE)	> 0.35 mm	> 120 minutes

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 A.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state Liquid
Appearance Viscous liquid
Colour white
Odour Characteristic.
Odour threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point		Not determined.
Initial boiling point and boiling range	> 100 °C	@ 760 mmHg.
Flammability		Not applicable.
Flammability Limit in Air		No information available.
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point	168 °C	Closed cup.

Autoignition temperature		No information available.
Decomposition temperature		No information available.
pH		Not applicable. Insoluble in water.
pH (as aqueous solution)		No information available.
Kinematic viscosity	500000 cSt	@ 25 °C.
Dynamic viscosity		No information available.
Water solubility	Insoluble in water	
Solubility(ies)		No information available.
Partition coefficient		Not determined.
Vapour pressure		No information available.
Relative density	0.93	
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.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

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	Inhalation of vapours in high concentration may cause irritation of respiratory system.
Eye contact	Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. Causes eye burns.
Skin contact	Causes skin irritation. Brief contact may cause moderate skin irritation with local redness. Dryness and/or cracking. May cause itching.
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

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

Oral LD50 Oral LD50 > 2000 mg/kg
Dermal LD50 Dermal LD50 > 2000 mg/kg

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
ALCOHOLS C12 14 SECONDARY ETHOXYLATED	> 412 mg/kg (Rat)	> 2800 mg/kg (Rabbit)	= 1.06 mg/L (Rat) 4 h
OCTAMETHYLCYCLOTETRAS ILOXANE	> 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. Brief contact may cause moderate skin irritation with local redness. Dryness and/or cracking. May cause itching.

ALCOHOLS C12 14 SECONDARY ETHOXYLATED (84133-50-6)

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

OCTAMETHYLCYCLOTETRASILOXANE (556-67-2)

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

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

ALCOHOLS C12 14 SECONDARY ETHOXYLATED (84133-50-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Causes serious eye damage May cause permanent damage if eye is not immediately irrigated. Causes

					eye burns
--	--	--	--	--	-----------

OCTAMETHYLCYCLOTETRASILOXANE (556-67-2)

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

Respiratory or skin sensitisation Not a skin sensitiser.

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

ALCOHOLS C12 14 SECONDARY ETHOXYLATED (84133-50-6)

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

OCTAMETHYLCYCLOTETRASILOXANE (556-67-2)

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

Germ cell mutagenicity No information available.

Component Information

ALCOHOLS C12 14 SECONDARY ETHOXYLATED (84133-50-6)

Method	Species	Results
	in vitro	Negative

OCTAMETHYLCYCLOTETRASILOXANE (556-67-2)

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

Carcinogenicity No information available.

Component Information

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 No information available.

Chemical name	United Kingdom
OCTAMETHYLCYCLOTETRASILOXANE	Repr. 2

ALCOHOLS C12 14 SECONDARY ETHOXYLATED (84133-50-6)

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 No information available.

ALCOHOLS C12 14 SECONDARY ETHOXYLATED (84133-50-6)

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 No information available.

Component Information

ALCOHOLS C12 14 SECONDARY ETHOXYLATED (84133-50-6)

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

OCTAMETHYLCYCLOTETRASILOXANE (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 Based on available data the classification criteria are not met.

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity The environmental impact of this product has not been fully investigated.

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

ALCOHOLS C12 14 SECONDARY ETHOXYLATED (84133-50-6)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
	Pimephales promelas	LC50	3.2 - 3.6 mg/L	96 hours	
	Daphnia magna	EC50	7.3 mg/L	48 hours	
	Bacteria toxicity	EC50	> 1000 mg/L	16 hours	

OCTAMETHYLCYCLOTETRASILOXANE (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	
					Based on testing of comparable products: The estimated maximum aqueous concentration of Octamethyl Cyclotetrasiloxane (D4) from migration to water from the product as supplied is below the D4 established no-effect threshold (< 0.0079 mg/L) for aquatic organisms.

12.2. Persistence and degradability

Persistence and degradability No information available.

ALCOHOLS C12 14 SECONDARY ETHOXYLATED (84133-50-6)

Method	Exposure time	Value	Results
OECD Test No. 301F: Ready Biodegradability: Manometric Respirometry Test (TG 301 F)	28 days	Biodegradation > 60 %	Readily biodegradable

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
ALCOHOLS C12 14 SECONDARY ETHOXYLATED	2.72
OCTAMETHYLCYCLOTETRASILOXANE	6.49

12.4. Mobility in soil**Mobility in soil**

Insoluble.

12.5. Results of PBT and vPvB assessment**PBT and vPvB assessment**

The product does not contain any substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
OCTAMETHYLCYCLOTETRASILOXANE	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**

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** Not regulated**14.2****14.3 Transport hazard class(es)** Not regulated**14.4 Packing group** Not regulated**14.5 Environmental hazards** No**14.6 Special precautions for user****Special Provisions** None**IMDG****14.1 UN number or ID number** Not regulated

14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	None
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	None

ADR

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	None

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).

Product restricted per REACH Annex XVII: 3. 75

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
OCTAMETHYLCYCLOTETRAILOXANE - 556-67-2	Use restricted. See item 70. 75	-

Persistent Organic Pollutants

Not applicable

Export Notification requirements

Not applicable

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 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**

H302 - Harmful if swallowed
H315 - Causes skin irritation
H318 - Causes serious eye damage
H332 - Harmful if inhaled

Legend

SVHC: Substances of Very High Concern for Authorisation:

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 07-Jan-2019
Revision date 03-Dec-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