

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

Supersedes date 18-Mar-2024

Revision date 14-Mar-2025

Revision Number 6

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

1.1. Product identifier

Product Code(s) 11634
Safety data sheet number 11634
Product Name TERGITOL 15-S-9 SURFACTANT
Substance Name ALCOHOLS, C12-14-SECONDARY, ETHOXYLATED
CAS No 84133-50-6
Pure substance/mixture Substance
Contains ALCOHOLS C11-15 SECONDARY ETHOXYLATED
Molecular weight 596 g/mol

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

Recommended use Multi-purpose surfactant.

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

Acute toxicity - Oral	Category 4 - (H302)
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Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 1 - (H318)

2.2. Label elements

Contains ALCOHOLS C11-15 SECONDARY ETHOXYLATED



Signal word

Danger

Hazard statements

H302 - Harmful if swallowed

H315 - Causes skin irritation

H318 - Causes serious eye damage

H332 - Harmful if inhaled

Precautionary statements

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

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

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

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

Additional information

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

2.3. Other hazards

In case of spills, beware of slippery floors and surfaces.

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)
ALCOHOLS C12 14 SECONDARY ETHOXYLATED 84133-50-6	>= 97.0 %	-	-	Acute Tox. 4 (H332) Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)	-	-	-
POLYETHYLENE GLYCOL	<= 3.0 %	500-038-2	-	Not Classified	-	-	-

25322-68-3							
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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. Ensure that eyewash stations and safety showers are close to the workstation location.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical attention immediately if symptoms occur.

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

Inhalation	Harmful if inhaled.
Eyes	Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. Causes eye burns.
Dermal	Causes skin irritation.
Ingestion	Harmful if swallowed

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.
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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. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids..

Hazardous combustion products Carbon oxides.

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. Evacuate personnel to safe areas. No action shall be taken involving any personal risk or without suitable training. Keep people away from and upwind of spill/leak. In case of spills, beware of slippery floors and surfaces.

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. Pick up and transfer to properly labelled containers. Do not use water to clean up.

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. Wash skin thoroughly after handling.

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.

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]

[4] Systemic health effects.
[6] Long 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]

[4] Systemic health effects.
[6] Long 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	

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	

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 chloride (PVC)	> 0.35 mm	> 120 minutes
	Wear protective Viton™ gloves	> 0.35 mm	> 120 minutes
	Chlorinated polyethylene (CPE)	> 0.35 mm	> 120 minutes
	Polyvinyl alcohol (PVA)	> 0.35 mm	> 120 minutes

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

Respiratory protection Use appropriate respiratory protection.
Recommended filter type: 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 yellow
Odour Mild.
Odour threshold No information available

Property **Values**
Melting point / freezing point
Initial boiling point and boiling range > 250 °C

Flammability
Flammability Limit in Air
Upper flammability or explosive limits
Lower flammability or explosive limits

Remarks • Method
 Not applicable.
 @ 760 mmHg., Calculation method. Decomposes prior to boiling.
 No information available.
 No information available.

Flash point	193 °C 243 °C	CC (closed cup). (ASTM D93). Open cup. ASTM D92.
Autoignition temperature		No information available.
Decomposition temperature		No information available.
pH	7.1	solution (1 %). Calculation method.
pH (as aqueous solution)		No information available.
Kinematic viscosity	59.6 cSt	Calculation method.
Dynamic viscosity		No information available.
Water solubility	partially soluble	
Solubility(ies)		No information available.
Partition coefficient	log Pow: 2.72	Estimated.
Vapour pressure	<0.01 mmHg	@ 20 °C. Calculation method.
Relative density	1.006	@ 60 °C / 20 °C. Calculation method.
Bulk density		No information available
Liquid Density	No information available	No information available
Relative vapour density	> 1	Calculation method.
Particle characteristics		Not applicable. liquid.
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		
Pour Point	9 °C	
Molecular weight	596 g/mol	
Evaporation rate	< 0.01 n-butyl acetate=1	Calculation method

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

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 None under normal processing.

Hazardous polymerisation Hazardous polymerisation does not occur.

10.4. Conditions to avoid

Conditions to avoid Product may decompose at elevated temperatures.

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

Hazardous decomposition products Carbon oxides.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Information on likely routes of exposure****Product Information**

Inhalation	Harmful if inhaled.
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	Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics**Symptoms****Acute toxicity****Numerical measures of toxicity**

Oral LD50	Oral LD50 > 412 mg/kg
Dermal LD50	Dermal LD50 > 2800 mg/kg
Inhalation LC50	Inhalation LC50 1.06 mg/l

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
POLYETHYLENE GLYCOL	> 10000 mg/kg (Rat)	> 20000 mg/kg (Rat)	> 2.5 mg/l (Rat) (6h)

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

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Causes skin irritation Brief contact may cause moderate skin irritation with local redness. Dryness and/or cracking May cause itching.

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Prolonged exposure not likely to cause significant skin

					irritation. May cause more severe response if skin is abraded (scratched or cut).
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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

POLYETHYLENE GLYCOL (25322-68-3)

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

Respiratory or skin sensitisation Not a skin sensitiser.

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

Method	Species	Exposure route	Results
	Human evidence	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

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

Component Information

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

Method	Species	Results
	in vitro	Negative

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Results
	in vitro	Negative
		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.

Reproductive toxicity

This product does not contain any known or suspected reproductive hazards.

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

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

POLYETHYLENE GLYCOL (25322-68-3)

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

STOT - single exposure

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

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

POLYETHYLENE GLYCOL (25322-68-3)

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

Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.

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

POLYETHYLENE GLYCOL (25322-68-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Based on available data, repeated

					exposures are not anticipated to cause significant adverse effects Recent findings of kidney failure and death in burn patients, as well as some studies using animal burn models, suggest that polyethylene glycol may have been a factor. The use of topical applications containing this material may not be appropriate in severely burned patients.
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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.

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

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

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

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	

12.2. Persistence and degradability

Persistence and degradability Readily biodegradable.

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

Equivalent.			
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

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

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Bioconcentration factor (BCF) 29 Fish

Chemical name	Partition coefficient
ALCOHOLS C12 14 SECONDARY ETHOXYLATED	2.72

12.4. Mobility in soil

Mobility in soil partially soluble.

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
POLYETHYLENE GLYCOL	The substance is not PBT / vPvB

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, 77

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****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 6 9 11 12 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

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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