

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

Revision date 11-Oct-2023

Revision Number 1

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

1.1. Product identifier

Product Code(s) 66127
Safety data sheet number 66127
Product Name T559TF TOLUENE FREE CLEANER

Pure substance/mixture Mixture

Contains HYDROCARBONS C7 - C9 N ALKANES, ISOALKANES, CYCLICS, BUTANONE

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

Recommended use Industrial use Cleaning agent

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)
Serious eye damage/eye irritation	Category 2 - (H319)
Specific target organ toxicity — single exposure	Category 3 - (H336)
Category 3 Narcotic effects	
Aspiration hazard	Category 1 - (H304)
Chronic aquatic toxicity	Category 2 - (H411)

2.2. Label elements

Contains HYDROCARBONS C7 - C9 N ALKANES, ISOALKANES, CYCLICS, BUTANONE

**Signal word**

Danger

Hazard statements

H304 - May be fatal if swallowed and enters airways
 H319 - Causes serious eye irritation
 H336 - May cause drowsiness or dizziness
 H411 - Toxic to aquatic life with long lasting effects
 H225 - Highly flammable liquid and vapour
 EUH066 - Repeated exposure may cause skin dryness or cracking

Precautionary statements

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
 P273 - Avoid release to the environment
 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
 P391 - Collect spillage

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

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)
HYDROCARBONS C7 - C9 N ALKANES, ISOALKANES,	25 - <60 %	920-750-0	-	Aquatic Chronic 2 (H411) Asp. Tox. 1 (H304) STOT SE 3 (H336)	-	-	-

CYCLICS -				Flam. Liq. 2 (H225)			
BUTANONE 78-93-3	25 - <60 %	201-159-0 (606-002-00 -3)	-	(EUH066) Flam. Liq. 2 (H225) Eye Irrit. 2 (H319) STOT SE 3 (H336)	-	-	-

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	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
Inhalation	Remove to fresh air. Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical attention. Delayed pulmonary edema may occur.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Get immediate medical attention.
Self-protection of the first aider	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Avoid contact with skin, eyes or clothing.

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

Symptoms	Difficulty in breathing. Coughing and/ or wheezing. Dizziness. May cause redness and tearing of the eyes. Burning sensation. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
Inhalation	Coughing and/ or wheezing. Difficulty in breathing. Dizziness. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
Eyes	Burning sensation. May cause redness and tearing of the eyes.
Ingestion	May be fatal if swallowed and enters airways

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

Note to doctors	Because of the danger of aspiration, emesis or gastric lavage should not be used unless the
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risk is justified by the presence of additional toxic substances. NOTE! Effects may be delayed. Keep affected person under observation.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO₂). Water spray. Alcohol resistant foam.

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 Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Hazardous combustion products Carbon oxides. May emit toxic fumes under fire conditions.

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 Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.

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 Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapour suppressing foam may be used to reduce vapours. Dyke far ahead of spill to collect run-off water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.

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 Use personal protection equipment. Avoid breathing vapours or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment.

General hygiene considerations Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labelled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers.

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
BUTANONE 78-93-3	TWA: 200 ppm TWA: 600 mg/m ³ STEL: 300 ppm STEL: 899 mg/m ³ Sk*

Biological occupational exposure limits

Chemical name	United Kingdom
BUTANONE 78-93-3	70 micromol per litre - post shift 2 mg/l - End of shift

Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
HYDROCARBONS C7 - C9 N ALKANES, ISOALKANES, CYCLICS -		773 mg/kg/day	2035 mg/m ³
BUTANONE 78-93-3		1161 mg/kg bw/day [4] [6]	600 mg/m ³ [4] [6]

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

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
HYDROCARBONS C7 - C9 N ALKANES, ISOALKANES, CYCLICS -	699 mg/kg/day [6]	699 mg/kg/day	608 mg/m ³
BUTANONE 78-93-3	31 mg/kg bw/day [4] [6]		106 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
BUTANONE 78-93-3	55.8 mg/L	55.8 mg/L	55.8 mg/L		

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
BUTANONE 78-93-3	284.74 mg/kg sediment dw	284.7 mg/kg sediment dw	709 mg/L	22.5 mg/kg soil dw	1000 mg/kg food

8.2. Exposure controls**Engineering controls**

Apply technical measures to comply with the occupational exposure limits. Use explosion-proof ventilating equipment. Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

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. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. Gloves must conform to standard EN 374.

Gloves			
Duration of contact	PPE - Glove material	Glove thickness	Break through time
	Linear low density polyethylene (LLDPE)	0.062 mm	>480 minutes

Skin and body protection	Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.
Respiratory protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
General hygiene considerations	Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Liquid
Colour	colourless transparent
Odour	Solvent.
Odour threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point		No information available
Initial boiling point and boiling range	79 °C	No information available
Flammability		No information available
Flammability Limit in Air		No information available
Upper flammability or explosive limits	11.5 % V	
Lower flammability or explosive limits	0.6 % V	
Flash point	-9 °C	No information available
Autoignition temperature	>200 °C	No information available
Decomposition temperature		No information available
pH		No information available
pH (as aqueous solution)		No information available
Kinematic viscosity	<20.5 mm ² /s	@ 40 °C
Dynamic viscosity		No information available
Water solubility		No information available
Solubility(ies)		No information available
Partition coefficient		No information available
Vapour pressure	6405 Pa @ 20°C 24106.94 Pa @ 50°C	No information available
Relative density	0.774	No information available
Bulk density	773.8 kg/m ³	
Liquid Density		
Relative vapour density		No information available
Particle characteristics		No information available
Particle Size		
Particle Size Distribution		
Explosive properties	No information available	
Oxidising properties	No information available	

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Stable under recommended storage 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 Highly flammable liquid and vapour. Vapours can form explosive mixtures with air.

10.4. Conditions to avoid

Conditions to avoid Protect from direct sunlight. Excessive heat. static discharge (electrostatic discharge).

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

Hazardous decomposition products Carbon oxides. May emit toxic fumes under fire conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available. Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. May cause irritation of respiratory tract. May cause drowsiness or dizziness.
Eye contact	Specific test data for the substance or mixture is not available. May cause irritation. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
Skin contact	Repeated exposure may cause skin dryness or cracking. Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation.
Ingestion	Specific test data for the substance or mixture is not available. Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Difficulty in breathing. Coughing and/ or wheezing. Dizziness. May cause redness and

tearing of the eyes. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Acute toxicity

Numerical measures of toxicity

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

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
HYDROCARBONS C7 - C9 N ALKANES, ISOALKANES, CYCLICS	> 5820 mg/kg (Rat)	> 2920 mg/kg (Rat)	> 23.3 mg/l (Rat) (4h)
BUTANONE	= 2,657 - 5,554 mg/kg (Rat)	> 5,000 mg/kg (Rabbit)	= 34.5 mg/l (Rat) (4h)

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation May cause skin irritation.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

BUTANONE (78-93-3)

Method	Species	Exposure route	Results
OECD 406	Guinea pig	Dermal	Not a skin sensitiser

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Component Information BUTANONE (78-93-3)

Method	Species	Results
	in vitro	Negative

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT - single exposure May cause drowsiness or dizziness.

STOT - repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard May be fatal if swallowed and enters airways.

Other adverse effects No information available.

SECTION 12: Ecological information**12.1. Toxicity**

Ecotoxicity Toxic to aquatic life with long lasting effects.

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

HYDROCARBONS C7 - C9 N ALKANES, ISOALKANES, CYCLICS (-)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
	Oncorhynchus mykiss (rainbow trout)	LC50	> 13.4 mg/L	96 hours	
	Daphnia magna	EC50	3 mg/L	48 hours	

BUTANONE (78-93-3)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 203: Fish, Acute Toxicity Test	Pimephales promelas	LC50	2,993 mg/L	96 hours	Acute aquatic toxicity
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test	Daphnia magna	EC50	308 mg/L	48 hours	Acute aquatic toxicity
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test	Pseudokirchneriella subcapitata	ErC50	2,029 mg/L	96 hours	Acute aquatic toxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
BUTANONE	-	LC50: 3130 - 3320mg/L (96h, Pimephales promelas)	-	EC50: >520mg/L (48h, Daphnia magna) EC50: =5091mg/L (48h, Daphnia magna) EC50: 4025 - 6440mg/L (48h, Daphnia magna)

12.2. Persistence and degradability

Persistence and degradability No information available.

HYDROCARBONS C7 - C9 N ALKANES, ISOALKANES, CYCLICS (-)

Method	Exposure time	Value	Results
	28 days	98%	Readily biodegradable

BUTANONE (78-93-3)

Method	Exposure time	Value	Results
OECD Test No. 301D: Ready Biodegradability: Closed Bottle Test (TG 301 D)	28 days	98% Biodegradation	Readily biodegradable

12.3. Bioaccumulative potential

Bioaccumulation No information available.

Component Information

Chemical name	Partition coefficient
BUTANONE	0.29

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

Chemical name	PBT and vPvB assessment
BUTANONE	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 Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

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 UN1993
 14.2 UN proper shipping name FLAMMABLE LIQUID, N.O.S. (BUTANONE, HYDROCARBONS C7 - C9 N ALKANES, ISOALKANES, CYCLICS)
 14.3 Transport hazard class(es) 3
 14.4 Packing group II
 14.5 Environmental hazards Yes
 14.6 Special precautions for user
 Special Provisions A3
 ERG Code 3H

IMDG

14.1 UN number or ID number UN1993
 UN proper shipping name FLAMMABLE LIQUID, N.O.S. (BUTANONE, HYDROCARBONS C7 - C9 N ALKANES, ISOALKANES, CYCLICS)
 14.3 Transport hazard class(es) 3
 14.4 Packing group II
 14.5 Environmental hazards Yes
 14.6 Special precautions for user
 Special Provisions 274
 EmS-No F-E, S-E
 14.7 Maritime transport in bulk according to IMO instruments No information available

RID

14.1 UN number or ID number UN1993
 14.2 UN proper shipping name FLAMMABLE LIQUID, N.O.S. (BUTANONE, HYDROCARBONS C7 - C9 N ALKANES, ISOALKANES, CYCLICS)
 14.3 Transport hazard class(es) 3
 14.4 Packing group II
 14.5 Environmental hazards Yes

14.6 Special precautions for user

Special Provisions 274, 601, 640D
Classification code F1

ADR

14.1 UN number or ID number UN1993
14.2 UN proper shipping name FLAMMABLE LIQUID, N.O.S. (BUTANONE, HYDROCARBONS C7 - C9 N ALKANES, ISOALKANES, CYCLICS)
14.3 Transport hazard class(es) 3
14.4 Packing group II
14.5 Environmental hazards Yes
14.6 Special precautions for user
Special Provisions 274, 601, 640C
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 does not contain substances subject to authorisation (UK REACH - Annex XIV).

Persistent Organic Pollutants

Not applicable

Export Notification requirements

Not applicable

Dangerous substance category per COMAH Regulations 2015 (as amended)

E2 - Hazardous to the Aquatic Environment in Category Chronic 2
P5b - 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/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
KECL	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 Not applicable

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**

EUH066 - Repeated exposure may cause skin dryness or cracking
 H225 - Highly flammable liquid and vapour
 H304 - May be fatal if swallowed and enters airways
 H319 - Causes serious eye irritation
 H336 - May cause drowsiness or dizziness
 H411 - Toxic to aquatic life with long lasting effects

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 ***Indicates updated data since last publication

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)
EPA (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)
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 K Winter

Revision date 11-Oct-2023

**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