

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

Supersedes date 10-Aug-2022

Revision date 29-Jul-2024

Revision Number 4

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

1.1. Product identifier

Product Code(s) 11113
Safety data sheet number 11113
Product Name TRITON BG 10 SURFACTANT
Synonyms TRITON BG-10
Pure substance/mixture Mixture

Contains D-GLUCOPYRANOSE, OLIGOMERIC, DECYL OCTYL GLYCOSIDE

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.
Use in oil and gas field drilling and production operations
Industrial use
Professional use
Consumer 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

Serious eye damage/eye irritation

Category 1 - (H318)

2.2. Label elements

Contains D-GLUCOPYRANOSE, OLIGOMERIC, DECYL OCTYL GLYCOSIDE

**Signal word**

Danger

Hazard statements

H318 - Causes serious eye damage

Precautionary statements

P280 - Wear eye protection/ 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

Unknown aquatic toxicity

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

2.3. Other hazards

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

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)
D-GLUCOPYRANOSE, OLIGOMERIC, DECYL OCTYL GLYCOSIDE 68515-73-1	> 60.0 - < 80.0 %	-	-	Eye Dam. 1 (H318)	-	-	-
WATER 7732-18-5	> 20.0 - < 40.0 %	231-791-2	-	Not Classified	-	-	-
OCTANOL 111-87-5	< 5.0 %	203-917-6	-	Aquatic Chronic 3 (H412) Eye Irrit. 2 (H319)	-	-	-
DECAN-1-OL 112-30-1	< 5.0 %	203-956-9	-	Aquatic Chronic 3 (H412)	-	-	-

				Eye Irrit. 2 (H319)			
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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.
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**Symptoms**

Eyes	Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. Causes eye burns.
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4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors	Treat symptomatically. Chemical eye burns may require extended irrigation. Chemical burns must be treated promptly by a physician.
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SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable Extinguishing Media	To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or 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	When heated and in case of fire, toxic vapours/gases may be formed. This material will not burn until the water has evaporated. Residue can burn.
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.
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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. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. No action shall be taken involving any personal risk or without suitable training. 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.
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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.
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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. 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.
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7.3. Specific end use(s)

Specific use(s)	See section 1 for more information.
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Risk Management Methods (RMM)	The information required is contained in this Safety Data Sheet.
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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
D-GLUCOPYRANOSE, OLIGOMERIC, DECYL OCTYL GLYCOSIDE 68515-73-1		595000 mg/kg bw/day [4] [6]	420 mg/m ³ [4] [6]
OCTANOL 111-87-5		50 mg/kg bw/day [4] [6] 0.190 mg/cm ² [5] [6]	176 mg/m ³ [4] [6] 106 mg/m ³ [5] [6]
DECAN-1-OL 112-30-1		250 mg/kg bw/day [4] [6] 0.19 mg/m ³ [5] [6]	176 mg/m ³ [4] [6] 129 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
D-GLUCOPYRANOSE, OLIGOMERIC, DECYL OCTYL GLYCOSIDE 68515-73-1	35.7 mg/kg bw/day [4] [6]	357000 mg/kg bw/day [4] [6]	124 mg/m ³ [4] [6]
OCTANOL 111-87-5	12.5 mg/kg bw/day [4] [6]	25 mg/kg bw/day [4] [6] 0,067 mg/cm ² [5] [6]	43.5 mg/m ³ [4] [6]
DECAN-1-OL 112-30-1	12.5 mg/kg bw/day [4] [6]	125 mg/kg bw/day [4] [6] 0,067 mg/cm ² [5] [6]	43.5 mg/m ³ [4] [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
D-GLUCOPYRANOSE, OLIGOMERIC, DECYL OCTYL GLYCOSIDE 68515-73-1	0.176 mg/L	0.27 mg/L	0.0176 mg/L		
OCTANOL 111-87-5	0.1 mg/L		0.01 mg/L		
DECAN-1-OL 112-30-1	0.021 mg/L		0.0021 mg/L		

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
D-GLUCOPYRANOSE, OLIGOMERIC, DECYL OCTYL GLYCOSIDE 68515-73-1	1.516 mg/kg sediment dw	0.152 mg/kg sediment dw	560 mg/L	0.654 mg/kg soil dw	111.11 mg/kg food
OCTANOL 111-87-5	1.6 mg/kg sediment dw	0.16 mg/kg sediment dw		0.26 mg/kg soil dw	
DECAN-1-OL 112-30-1	3.2 mg/kg sediment dw	0.32 mg/kg sediment dw		0.63 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
	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 nitrile rubber gloves	> 0.35 mm	> 120 minutes
	Wear protective Viton™ gloves	> 0.35 mm	> 120 minutes
	Chlorinated polyethylene (CPE)	> 0.35 mm	> 120 minutes
Avoid contact with:	Polyvinyl alcohol (PVA)		

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

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid

Appearance	Liquid
Colour	brown
Odour	Pungent.
Odour threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point	-24 °C	Calculation method.
Initial boiling point and boiling range	102 °C	@ 760 mmHg. Calculation method.
Flammability		No information available.
Flammability Limit in Air		No information available.
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point		No information available.
Autoignition temperature		No information available.
Decomposition temperature		No information available.
pH	7.6	Calculation method.
pH (as aqueous solution)		No information available.
Kinematic viscosity		No information available.
Dynamic viscosity	3700 mPa s	@ 25 °C. Calculation method.
Water solubility	completely soluble	
Solubility(ies)		No information available.
Partition coefficient		Not determined.
Vapour pressure	17.9 mmHg	@ 20 °C. Calculation method.
Relative density	1.17	@ 20 °C / 20 °C. Calculation method.
Bulk density		No information available
Liquid Density	No information available	No information available
Relative vapour density	0.8	Calculation method.
Particle characteristics		Not applicable. liquid.
Particle Size	No information available	
Particle Size Distribution	No information available	
Explosive properties	No information available	
Oxidising properties	No information available	

9.2. Other information 1.0 n-butyl acetate=1 Calculation method

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No information available.
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10.2. Chemical stability

Stability	Stable under normal conditions.
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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.
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10.5. Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong oxidising agents. Strong reducing 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	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	May cause slight skin irritation. Redness.
Ingestion	May cause discomfort if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity**Numerical measures of toxicity**

The following values are calculated based on chapter 3.1 of the GHS document
> 3730 mg/kg > 8000 mg/kg

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
D-GLUCOPYRANOSE, OLIGOMERIC, DECYL OCTYL GLYCOSIDE	> 3000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
OCTANOL	> 5000 mg/kg (Rat)	>2000 - <4000 mg/kg (Rabbit)	-
DECAN-1-OL	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rat)	> 2.05 mg/L (Rat) 4h

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

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

D-GLUCOPYRANOSE, OLIGOMERIC, DECYL OCTYL GLYCOSIDE (68515-73-1)

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

OCTANOL (111-87-5)

Method	Species	Exposure route	Effective dose	Exposure time	Results
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					May cause slight irritation Redness
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DECAN-1-OL (112-30-1)

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

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

D-GLUCOPYRANOSE, OLIGOMERIC, DECYL OCTYL GLYCOSIDE (68515-73-1)

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

OCTANOL (111-87-5)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Effects may be slow to heal. May cause slight eye irritation

DECAN-1-OL (112-30-1)

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

Respiratory or skin sensitisation No information available.

OCTANOL (111-87-5)

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

DECAN-1-OL (112-30-1)

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

Germ cell mutagenicity No information available.

Product Information		
Method	Species	Results
	in vitro	Negative

Component Information

D-GLUCOPYRANOSE, OLIGOMERIC, DECYL OCTYL GLYCOSIDE (68515-73-1)

Method	Species	Results
	in vitro	Negative

OCTANOL (111-87-5)

Method	Species	Results
	in vitro	Negative
		Negative Did not show mutagenic

		effects in animal experiments
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DECAN-1-OL (112-30-1)

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

Carcinogenicity

No information available.

Component Information

OCTANOL (111-87-5)

Method	Species	Results
		Did not cause cancer in laboratory animals.

Reproductive toxicity

No information available.

OCTANOL (111-87-5)

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

DECAN-1-OL (112-30-1)

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

STOT - single exposure

No information available.

OCTANOL (111-87-5)

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

DECAN-1-OL (112-30-1)

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

STOT - repeated exposure

Based on available data, a STOT-RE classification is not warranted.

Component Information

D-GLUCOPYRANOSE, OLIGOMERIC, DECYL OCTYL GLYCOSIDE (68515-73-1)

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

OCTANOL (111-87-5)

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

DECAN-1-OL (112-30-1)

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

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.

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 203: Fish, Acute Toxicity Test or Equivalent.	Pimephales promelas	LC50	198 mg/L	96 hours	
	copepod Acartia tonsa	LC50	17 mg/L	48 hours	
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test or Equivalent.	Daphnia magna	EC50	280 mg/L	48 hours	
	Skeletonema costatum	EC50	21 mg/L	72 hours	

D-GLUCOPYRANOSE, OLIGOMERIC, DECYL OCTYL GLYCOSIDE (68515-73-1)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test	Daphnia magna	EC50	> 100 mg/L		
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test	Daphnia magna	NOEC	> 1 - 10 mg/L		

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 Equivalent.	28 days	Biodegradation > 60 %	Readily biodegradable

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
D-GLUCOPYRANOSE, OLIGOMERIC, DECYL OCTYL GLYCOSIDE	< 1.77
OCTANOL	3.5
DECAN-1-OL	4.5

12.4. Mobility in soil

Mobility in soil completely 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
D-GLUCOPYRANOSE, OLIGOMERIC, DECYL OCTYL GLYCOSIDE	The substance is not PBT / vPvB
OCTANOL	The substance is not PBT / vPvB
DECAN-1-OL	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).

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 information available

SECTION 16: Other information

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

Full text of H-Statements referred to under section 3

H318 - Causes serious eye damage

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
STOT - repeated exposure
Acute aquatic toxicity
Chronic aquatic toxicity
Aspiration hazard
Ozone

Calculation method
Calculation method
Calculation method
Calculation method
Calculation method
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