

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

Supersedes date 13-Nov-2023

Revision date 16-May-2025

Revision Number 3

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

1.1. Product identifier

Product Code(s) 64190

Safety data sheet number 64190

Product Name ECOSENSE GL 60 HL SURFACTANT

Pure substance/mixture Mixture

Contains SOPHOROLIPIDS: FERMENTATION PRODUCTS OF GLUCOSE AND FATTY ACIDS, C18 (UNSATURATED), GLYCEROL ESTERS WITH YEAST CANDIDA BOMBICOLA

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

Recommended use Cosmetics

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)
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2.2. Label elements

Contains SOPHOROLIPIDS: FERMENTATION PRODUCTS OF GLUCOSE AND FATTY ACIDS, C18 (UNSATURATED), GLYCEROL ESTERS WITH YEAST CANDIDA BOMBICOLA

**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

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)
SOPHOROLIPIDS: FERMENTATION PRODUCTS OF GLUCOSE AND FATTY ACIDS, C18 (UNSATURATED), GLYCEROL ESTERS WITH YEAST CANDIDA BOMBICOLA	> 50.0 - <= 55.0 %	941-810-2	-	Eye Dam. 1 (H318)	-	-	-
WATER 7732-18-5	>= 40.0 - <= 47.0 %	231-791-2	-	Not Classified	-	-	-
GLYCERINE 56-81-5	<= 2.0 %	200-289-5	-	Not classified	-	-	-
SODIUM	<= 0.9 %	208-534-8	-	Eye Irrit. 2 (H319)	-	-	-

BENZOATE 532-32-1							
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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. Chemical burns must be treated promptly by a physician. Get medical attention if symptoms occur. Ensure that eyewash stations and safety showers are close to the workstation location.
Skin contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if symptoms occur.
Ingestion	Rinse mouth thoroughly with water. Do NOT induce vomiting. Get medical attention if symptoms occur.

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

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	Chemical eye burns may require extended irrigation. Chemical burns must be treated promptly by a physician. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.
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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. Exposure to combustion products may be a hazard to health.
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.

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. 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. Avoid contact with: 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**

Chemical name	United Kingdom
GLYCERINE 56-81-5	TWA: 10 mg/m ³ STEL: 30 mg/m ³

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
GLYCERINE 56-81-5			56 mg/m ³ [5] [6]
SODIUM BENZOATE 532-32-1		62.5 mg/kg bw/day [4] [6]	3 mg/m ³ [4] [6] 0.1 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
GLYCERINE 56-81-5	229 mg/kg bw/day [4] [6]		33 mg/m ³ [5] [6]
SODIUM BENZOATE 532-32-1	16.6 mg/kg bw/day [4] [6]	31.25 mg/kg bw/day [4] [6]	1.5 mg/m ³ [4] [6] 0.06 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
GLYCERINE 56-81-5	0.885 mg/L	8.85 mg/L	0.0885 mg/L		
SODIUM BENZOATE 532-32-1	0.13 mg/L	0.305 mg/l	0.013 mg/L		

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
GLYCERINE 56-81-5	3.3 mg/kg sediment dw	0.33 mg/kg sediment dw	1000 mg/L	0.141 mg/kg soil dw	
SODIUM BENZOATE	1.76 mg/kg	0.176 mg/kg	10 mg/L	0.06 mg/kg soil dw	300 mg/kg food

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
532-32-1	sediment dw	sediment 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 Neoprene™ gloves	> 0.35 mm	> 120 minutes
	Nitrile/butadiene rubber ("nitrile" or "NBR").	> 0.35 mm	> 120 minutes
	Polyvinyl chloride (PVC)	> 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.
Recommended filter type: 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 Amber
Odour Mild. Aromatic.
Odour threshold No information available

Property	Values	Remarks • Method
Melting point / freezing point		Not determined.
Initial boiling point and boiling range		Not determined.
Flammability		No information available.
Flammability Limit in Air		Not determined.
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point	> 300 °F	CC (closed cup).
Autoignition temperature		Not determined.
Decomposition temperature		Not determined.
pH	4.0 - 5.0	solution (1 %).
pH (as aqueous solution)		No information available.
Kinematic viscosity		Not determined.
Dynamic viscosity		No information available.

Water solubility	partially soluble	
Solubility(ies)		
Partition coefficient	4.93	Estimated.
Vapour pressure		No information available.
Relative density	1.04 - 1.09	
Bulk density		No information available
Liquid Density	No information available	No information available
Relative vapour density		Not determined.
Particle characteristics		Not applicable. liquid.
Particle Size	No information available	
Particle Size Distribution	No information available	
Explosive properties	Not determined	
Oxidising properties	Not determined	

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.

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 Brief contact may cause slight skin irritation with local redness.

Ingestion May cause discomfort if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

Acute toxicity

Numerical measures of toxicity

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

ATEmix (oral) > 5000 mg/kg

ATEmix (dermal) > 5000 mg/kg

Oral LD50 > 5000 mg/kg

Dermal LD50 > 5000 mg/kg

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
GLYCERINE	27200 mg/kg (Rat)	56750 mg/kg	> 2.75 mg/L (Rat) 4 h
SODIUM BENZOATE	2100 - 3450 mg/kg (Rat)	-	-

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

Skin corrosion/irritation Brief contact may cause slight skin irritation with local redness.

SOPHOROLIPIDS: FERMENTATION PRODUCTS OF GLUCOSE AND FATTY ACIDS, C18 (UNSATURATED), GLYCEROL ESTERS WITH YEAST CANDIDA BOMBICOLA (-)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Brief contact may cause slight skin irritation with local redness.

GLYCERINE (56-81-5)

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

SODIUM BENZOATE (532-32-1)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD 404	Rabbit	Dermal			Brief contact is essentially non-irritating to skin.

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

SOPHOROLIPIDS: FERMENTATION PRODUCTS OF GLUCOSE AND FATTY ACIDS, C18 (UNSATURATED), GLYCEROL ESTERS WITH YEAST CANDIDA BOMBICOLA (-)

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
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GLYCERINE (56-81-5)

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

SODIUM BENZOATE (532-32-1)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD 405	Rabbit	eye			Causes serious eye irritation

Respiratory or skin sensitisation No information available.

SODIUM BENZOATE (532-32-1)

Method	Species	Exposure route	Results
			Skin contact may cause an allergic skin reaction in a small proportion of individuals

Germ cell mutagenicity No information available.

Component Information

GLYCERINE (56-81-5)

Method	Species	Results
	in vitro	Negative

SODIUM BENZOATE (532-32-1)

Method	Species	Results
Ames Test OECD Test No. 471: Bacterial Reverse Mutation Test	S. typhimurium	Negative
Ames Test OECD Test No. 471: Bacterial Reverse Mutation Test	Escherichia coli	Negative
OECD Test No. 473: In vitro Mammalian Chromosome Aberration Test	Chinese hamster cells	Positive
OECD 479 sister chromatid exchange assay	Human lymphocytes	Positive
OECD 487: In Vitro Mammalian Cell Micronucleus Test	Human lymphocytes	Positive
OECD Test No. 475: Mammalian Bone Marrow Chromosome Aberration Test	Rat	Negative
OECD Test No. 478: Rodent Dominant Lethal Test	Rat	Negative

Carcinogenicity No information available.

Component Information

GLYCERINE (56-81-5)

Method	Species	Results
		Did not cause cancer in laboratory animals.

SODIUM BENZOATE (532-32-1)

Method	Species	Results
	Rat	Did not cause cancer in laboratory animals. NOAEL $\geq$ 20,000 ppm

Reproductive toxicity No information available.

SODIUM BENZOATE (532-32-1)

Method	Species	Results
OECD Test No. 416: Two-Generation Reproduction Toxicity	Rat	No effects on fertility and early embryonic development were detected NOAEL $\geq$ 10,000 ppm
OECD Test No. 414: Pre-natal Development Toxicity Study	Rat	General Toxicity Maternal: NOAEL = 1.306 mg/kg bw/day
OECD Test No. 414: Pre-natal Development Toxicity Study	Rat	Developmental Toxicity: NOAEL = 1.306 mg/kg bw/day

STOT - single exposure No information available.

GLYCERINE (56-81-5)

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

GLYCERINE (56-81-5)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Excessive exposure to glycerine may cause increased fat levels in blood.

SODIUM BENZOATE (532-32-1)

Method	Species	Exposure route	Effective dose	Exposure time	Results
Chronic toxicity	Rat	Oral	10,000 - 20,000 ppm, 7 days/week	18 - 24 months	NOAEL $\geq$ 20,000 ppm
OECD Test No. 412: Sub-acute Inhalation Toxicity: 28-Day Study	Rat	Inhalation Dust/Mist	25; 250; 1200 mg/m ³ 6h/d, 5 days/week	4 weeks	NOAEC = 250 mg/m ³ Systemic Toxicity Test results on an analogous product
OECD Test No. 412: Sub-acute Inhalation Toxicity: 28-Day Study	Rat	Inhalation Dust/Mist	25; 250; 1200 mg/m ³ , 6h/d, 5 days/week	4 weeks	LOAEC = 25 mg/m ³ respiratory tract Test results on an analogous product
Subacute Toxicity	Rabbit	Dermal	100; 500; 2500, mg/kg bw/day, 5h/d, 5 days/week	3 weeks	NOAEL > 2500 mg/kg Test results on an analogous product

Aspiration hazard Not determined.

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.

GLYCERINE (56-81-5)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
	Fish Oncorhynchus mykiss (rainbow trout)	LC50	54000 mg/L	96 hours	
	Fish	LC50	> 1000 g/l	96 hours	
	Other aquatic organisms	LC50	> 1000 mg/L	96 hours	
	Crustacea Daphnia magna	EC50	> 10000 mg/L	24 hours	
	Other aquatic organisms Bacteria toxicity	EC50	> 1000 mg/L		
	Fish	TLM	> 1000 ppm	96 hours	
	Other aquatic organisms	TLM	> 1000 ppm	96 hours	
	Other aquatic organisms Microcystis aeruginosa		2900 mg/L		
	Other aquatic organisms Pseudomonas putida		> 10000 mg/L	16 hours	
	Algae Scenedesmus quadricauda		> 10000 mg/L	168 hours	

SODIUM BENZOATE (532-32-1)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
Acute toxicity	Pimephales promelas	LC50	> 100 mg/L	96 hours	
Acute toxicity	Daphnia magna	EC50	> 100 mg/L	96 hours	
Acute toxicity	Pseudokirchneriella subcapitata	ErC50	> 100 mg/L	72 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)	28 days	Biodegradation 75 %	Readily biodegradable

SODIUM BENZOATE (532-32-1)

Method	Exposure time	Value	Results
OECD Test No. 301B: Ready Biodegradability: CO ₂ Evolution Test (TG 301 B) or Equivalent.	28 days	Biodegradation > 74 %	Readily biodegradable

12.3. Bioaccumulative potential

Bioaccumulation May bioaccumulate.

Component Information

Chemical name	Partition coefficient
GLYCERINE	-1.76 – 2.6
SODIUM BENZOATE	1.88

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
GLYCERINE	The substance is not PBT / vPvB
SODIUM BENZOATE	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).

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
SODIUM BENZOATE - 532-32-1	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

Chemical name	The Biocidal Products Regulations 2001 (as amended)
SODIUM BENZOATE - 532-32-1	Simplified procedure - Category A

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**

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 3 4 5 7 8 9 11 15 16			

Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
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
Ozone

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