

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

Supersedes Date 25-Oct-2022***

Revision date 13-Aug-2023

Revision Number 2

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

1.1. Product identifier

Product Code(s) 64389***
Safety data sheet number 64389***
Product Name PRIMAL E 2001 LF EMULSION

Synonyms E 2001 LF***
Pure substance/mixture Mixture***

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

Recommended use Agriculture Binding agent Coating***

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

Not classified***

2.2. Label elements

Not classified***

Hazard statements

Not classified***

EUH208 *** Contains REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1), 1,2-BENZISOTHIAZOL-3(2H)-ONE, . May produce an allergic reaction.***

EUH210 - Safety data sheet available on request***

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.***

0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.***

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).***

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour).***

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).***

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)
POLY[OXY(METHYL-1,2-ETHANEDIYL)], .ALPHA.-(METHYLPHENYL)-.OMEGA.-HYDROXY-*** 9064-13-5	>= 0.1 - < 1.0 %	-	-	Skin Sens. 1 (H317)***	-	-	-
1,2-BENZISOTHIAZOL-3(2H)-ONE*** 2634-33-5	>= 0.025 - < 0.05 %	220-120-9 (613-088-00-6)***	-	Aquatic Chronic 3 (H412) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)***	Skin Sens. 1 :: C>=0.05%***	1***	-
REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)*** 55965-84-9	>= 0.0002 - < 0.0015 %	(613-167-00-5)***	-	(EUH071) Acute Tox. 3 (H301) Acute Tox. 2 (H310) Acute Tox. 2 (H330) Skin Corr. 1C (H314) Eye Dam. 1 (H318) Skin Sens. 1A (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)***	Eye Irrit. 2 :: 0.06%<=C<0.6 % Skin Corr. 1C :: C>=0.6% Skin Irrit. 2 :: 0.06%<=C<0.6 % Skin Sens. 1A :: C>=0.0015% Eye Dam. 1 :: C>=0.6%***	100***	100***

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	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. Get medical attention if symptoms occur.***

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

Symptoms	The product contains a sensitising substance which may provoke an allergic reaction among sensitive individuals.***
Eyes	May cause temporary eye irritation.***

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

Note to doctors	Treat symptomatically.
-----------------	------------------------

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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. Dried product is capable of burning.***
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 eyes, skin and clothing. Keep people away from and upwind of spill/leak. In case of spills, beware of slippery floors and surfaces.***

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

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 Collect with absorbent, non-combustible material into suitable 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 Ensure adequate ventilation. Use personal protection recommended in Section 8. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep container closed when not in use.***

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 from freezing. Stir well before use. Keep at temperatures between 1 and 49 °C.***

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
1,2-BENZISOTHIAZOL-3(2H)-ONE*** 2634-33-5		0.966 mg/kg bw/day [4] [6]***	6.81 mg/m ³ [4] [6]***
REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZO LIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H -ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)*** 55965-84-9			0.02 mg/m ³ [5] [6] 0.04 mg/m ³ [5] [7]***

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

Derived No Effect Level (DNEL) - General Public ***

Chemical name	Oral	Dermal	Inhalation
1,2-BENZISOTHIAZOL-3(2H)-ONE*** 2634-33-5		0.345 mg/kg [4] [6]***	1.2 mg/m ³ [4] [6]***
REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZO LIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H -ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)*** 55965-84-9	0.09 mg/kg bw/day [4] [6] 0.11 mg/kg bw/day [4] [7]***		0.02 mg/m ³ [5] [6] 0.04 mg/m ³ [5] [7]***

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

Predicted No Effect Concentration (PNEC) ***

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
1,2-BENZISOTHIAZOL-3(2H)-ONE*** 2634-33-5	0.004 mg/l***	0.0011 mg/l***	0.0004 mg/l***		
REACTION MASS OF: 5-CHLORO-2-METHYL-4-I SOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H -ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)*** 55965-84-9	0.00339 mg/l***	0.00339 mg/l***	0.00339 mg/l***		

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
1,2-BENZISOTHIAZOL-3(2H)-ONE*** 2634-33-5	0.0499 mg/kg sediment dw***	0.00499 mg/kg sediment dw***	1.03 mg/L***	3.0 mg/kg soil dw***	
REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISO SOTHAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H -ISOTHAZOL-3-ONE [EC NO. 220-239-6] (3:1)*** 55965-84-9	0.027 mg/kg sediment dw***	0.027 mg/kg sediment dw***	0.23 mg/L***	0.01 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 nitrile rubber gloves***	> 0.35 mm***	> 240 minutes***
	Polyvinyl chloride (PVC)***	> 0.35 mm***	> 240 minutes***
	Wear protective Neoprene™ gloves***	> 0.35 mm***	> 240 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

Milky white***

Odour

Characteristic.***

Odour threshold

No information available

Property

Values

Melting point / freezing point

Initial boiling point and boiling range 100*** °C***

Remarks • Method

No information available

@ 760 mm Hg Water***

Flammability		No information available
Flammability Limit in Air		Not applicable***
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point	-***	This product does not sustain combustion***
Autoignition temperature		***
Decomposition temperature		No information available
pH	8.5*** -*** 9.5***	***
pH (as aqueous solution)		No information available
Kinematic viscosity		No information available
Dynamic viscosity	< 500.000 mPa.s***	No information available
Water solubility		No information available
Solubility(ies)	Partly miscible***	***
Partition coefficient		No information available
Vapour pressure	2266.4808000 Pa***	@ 20 °C Water***
Relative density	1.0700***	***
Bulk density		

Water***

No information available

Relative vapour density < 1.0000***

Particle characteristics

Particle Size

Particle Size

Distribution

Explosive properties	No information available
Oxidising properties	No information available

9.2. Other information

VOC content 49.00 - 51.00%*** <*** 1.00*** (butyl acetate = 1) Water***

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.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

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	May cause temporary eye irritation.***
Skin contact	The product contains a sensitising substance which may provoke an allergic reaction among sensitive individuals. May cause slight irritation. Redness.***
Ingestion	Gastrointestinal discomfort.***

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity**Numerical measures of toxicity**

No information available

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

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.***
 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.***
 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).***
 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour).***
 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).***

>*** 5000*** mg/kg*** >*** 2000*** mg/kg***

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
POLY[OXY(METHYL-1,2-ETHANEDIYL)], ALPHA.-(METHYLPHENYL)-O MEGA.-HYDROXY-***	6000 mg/kg (Rat) ***	-	-
1,2-BENZISOTHIAZOL-3(2H)-O NE***	675.3 mg/kg (Rat) ***	> 2000 mg/kg (Rat)***	-
REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOT HIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H -ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)***	64 mg/kg (Rat) ***	= 87.12 mg/kg (Rabbit)***	0.33 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 irritation. Redness.***
Serious eye damage/eye irritation	May cause temporary eye irritation.***
Respiratory or skin sensitisation	The product contains a sensitising substance which may provoke an allergic reaction

among sensitive individuals.***

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

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.***

POLY[OXY(METHYL-1,2- ETHANEDIYL)], .ALPHA.-(METHYLPHENYL)-.OMEGA.-HYDROXY- (9064-13-5)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 203: Fish, Acute Toxicity Test***	Leuciscus idus***	LC50***	53 mg/L***	96 hours***	
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test***	Daphnia magna***	EC50***	116.47 mg/L***	48 hours***	
	Chlorella pyrenoidosa***	EC50***	> 100 mg/L***	72 hours***	

1,2-BENZISOTHIAZOL-3(2H)-ONE (2634-33-5)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 203: Fish, Acute Toxicity Test***	Oncorhynchus mykiss (rainbow trout)***	LC50***	1.9 mg/L***	96 hours***	
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test***	Daphnia magna***	EC50***	3.7 mg/L***	48 hours***	
	Mysidopsis bahia***	LC50***	1.9 mg/L***	96 hours***	
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test***	Pseudokirchneriella subcapitata***	ErC50***	0.8 mg/L***	72 hours***	
OECD Test No. 201: Freshwater Algae and	Pseudokirchneriella subcapitata***	NOEC***	0.21 mg/L***	72 hours***	

Cyanobacteria, Growth Inhibition Test***					
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test***	Skeletonema costatum***	ErC50***	0.36 mg/L***	72 hours***	
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test***	Skeletonema costatum***	NOEC***	0.15 mg/L***	72 hours***	

REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1) (55965-84-9)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 203: Fish, Acute Toxicity Test***	Oncorhynchus mykiss (rainbow trout)***	LC50***	0.19 mg/L***	96 hours***	
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test***	Daphnia magna***	LC50***	0.16 mg/L***	48 hours***	
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test***	Skeletonema costatum***	NOEC***	0.00049 mg/L***	48 hours***	
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test***	Skeletonema costatum***	ErC50***	0.0052 mg/L***	48 hours***	
Chronic aquatic toxicity***	Oncorhynchus mykiss (rainbow trout)***	NOEC***	0.05 mg/L***	14 days***	
Chronic aquatic toxicity***	Daphnia magna***	NOEC***	0.1 mg/L***	21 days***	

12.2. Persistence and degradability

Persistence and degradability No information available.

POLY[OXY(METHYL-1,2-ETHANEDIYL)], .ALPHA.-(METHYLPHENYL)-.OMEGA.-HYDROXY- (9064-13-5)

Method	Exposure time	Value	Results
OECD Test No. 301F: Ready Biodegradability: Manometric Respirometry Test (TG 301 F)***	28 days***	Biodegradation 80 - 90 %***	Readily biodegradable***

1,2-BENZISOTHIAZOL-3(2H)-ONE (2634-33-5)

Method	Exposure time	Value	Results
OECD Test No. 301B: Ready Biodegradability: CO2 Evolution Test (TG 301 B)***	28 days***	Biodegradation 24%***	Rapidly biodegradable***

REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1) (55965-84-9)

Method	Exposure time	Value	Results
	10 days***	Biodegradation < 50%***	Rapidly biodegradable***

12.3. Bioaccumulative potential

Bioaccumulation ***

Component Information

Chemical name	Partition coefficient
1,2-BENZISOTHIAZOL-3(2H)-ONE***	1.19***
REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)***	-0.486***

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
1,2-BENZISOTHIAZOL-3(2H)-ONE***	The substance is not PBT / vPvB***
REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)***	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 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

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 does not contain substances subject to authorisation (UK REACH - Annex XIV).

This product does not contain substances subject to restriction (UK REACH - Annex XVII).

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)

Chemical name	The Biocidal Products Regulations 2001 (as amended)
1,2-BENZISOTHIAZOL-3(2H)-ONE*** - 2634-33-5	Product-type 2: Disinfectants and algaecides not intended for direct application to humans or animals Product-type 6: Preservatives for products during storage Product-type 9: Fibre, leather, rubber and polymerised materials preservatives Product-type 11: Preservatives for liquid-cooling and processing systems Product-type 12: Slimicides Product-type 13: Working or cutting fluid preservatives***
REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)*** - 55965-84-9	Product-type 2: Disinfectants and algaecides not intended for direct application to humans or animals Product-type 4: Food and feed area Product-type 6: Preservatives for products during storage Product-type 11: Preservatives for liquid-cooling and processing systems Product-type 12: Slimicides Product-type 13: Working or cutting fluid preservatives***

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/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

EUH071 - Corrosive to the respiratory tract
 H301 - Toxic if swallowed
 H302 - Harmful if swallowed
 H310 - Fatal in contact with skin
 H314 - Causes severe skin burns and eye damage
 H315 - Causes skin irritation
 H317 - May cause an allergic skin reaction
 H318 - Causes serious eye damage
 H330 - Fatal if inhaled
 H400 - Very toxic to aquatic life
 H410 - Very toxic to aquatic life with long lasting effects
 H412 - Harmful 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 Lisa Bland***

Supersedes Date 25-Oct-2022***

Revision date 13-Aug-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