

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 as amended by Regulation (EU) No. 2020/878, and Regulation (EC) No. 1272/2008

Revision date 20-Jun-2023 **Revision Number** 1

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

1.1. Product identifier

**Product Code(s)** 1801, 1801-1, 1805, 1815, 1830, 1855

**Product Name** Citranox

**Unique Formula Identifier (UFI)** 9090-G056-100G-HXQD

None **Synonyms** 

Pure substance/mixture Mixture

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

Recommended use Detergent

Uses advised against Do not mix with other detergents unless otherwise specified

1.3. Details of the supplier of the safety data sheet

**Supplier** 

Alconox Inc. 30 Glenn St., Suite 309 White Plains, NY 10603 USA 914-948-4040

For further information, please contact

E-mail address cleaning@alconox.com

1.4. Emergency telephone number

ChemTel Inc.: North America: 1-888-255-3924 **Emergency telephone** 

International: +1-813-248-0573

Emergency telephone - §45 - (EC)1272/2008

112 Europe

### **SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**Classification according to Regulation (EC) No. 1272/2008 [CLP]

Eye irritation Category 2 - (H319)

2.2. Label elements



Signal word Warning

#### **Hazard statements**

H319 - Causes serious eye irritation.

### Precautionary Statements - EU (§28, 1272/2008)

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

P280 - Wear eye and 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.

P337 + P313 - If eye irritation persists: Get medical advice/attention.

#### 2.3. Other hazards

Other hazards Harmful to aquatic life.

PBT & vPvB None known

**Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors.

# SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Not applicable

#### 3.2 Mixtures

Chemical name	Weight-%	REACH registration number	EC No (EU Index No)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)		M-Factor (long-ter m)	Notes
Citric acid 77-92-9	10-20	No data available	201-069-1 (607-750-00-3)	Eye Irrit. 2 (H319) STOT SE 3 (H335)	-	-	-	-
Glycolic acid 79-14-1	7-13	No data available	201-180-5	No data available	-	-	-	-
Triethanolamine 102-71-6	1-5	No data available	203-049-8	[C]	-	-	-	-

Classification according to Regulation (EC) No. 1272/2008 [CLP] - Notes

# Full text of H- and EUH-phrases: see section 16

#### Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

<sup>[</sup>C] - Components with occupational exposure limits and/or biological occupational exposure limits requiring monitoring

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4	Inhalation LC50 - 4	Inhalation LC50 - 4
			hour - dust/mist -	hour - vapour - mg/L	hour - gas - ppm
			mg/L		
Citric acid	3000	2002	No data available	No data available	No data available
77-92-9					
Glycolic acid	1950	No data available	5.2052	No data available	No data available
79-14-1			3.6		
Triethanolamine	4190	20020	No data available	No data available	No data available
102-71-6					

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (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.

**Inhalation** Remove to fresh air.

**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. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and

persists.

**Skin contact** Wash skin with soap and water.

Ingestion Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce

vomiting. Call a doctor.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

**Symptoms** May cause redness and tearing of the eyes. Burning sensation.

**Effects of Exposure** No information available.

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

surrounding environment.

**Unsuitable extinguishing media** No information available.

5.2. Special hazards arising from the substance or mixture

**Specific hazards arising from the** No information available.

chemical

Hazardous combustion products Carbon oxides. Nitrogen oxides (NOx). Sulphur 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 Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

**Other information** Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

**Environmental precautions** Keep out of drains, sewers, ditches and waterways.

### 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 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 Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Do not eat, drink or smoke when using this product.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do

not eat, drink or smoke when using this product.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

Storage class (TRGS 510) LGK 10.

7.3. Specific end use(s)

Specific use(s) The identified uses for this product are detailed in Section 1.2.

# SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

**Exposure Limits** 

Chemical name	Euro	pean Union	Austria	Belgium	Bu	Igaria	Croatia
Triethanolamine 102-71-6		-	TWA-TMW: 0.8 ppm; TWA-TMW: 5 mg/m³; inhalable fraction STEL-KZGW: 1.6 ppm (4 X 15 min); STEL-KZGW: 10	TWA: 5 mg/m³;		_	-
			mg/m³ (4 X 15 min inhalable fraction S	);			
Chemical name		Cyprus	Czech Republic	Denmark	Es	tonia	Finland
Citric acid 77-92-9		-	TWA: 4 mg/m <sup>3</sup> ; dus			-	-
Triethanolamine 102-71-6		-	TWA: 5 mg/m³; Ceiling: 10 mg/m³ pSk	STEL: 1 ppm; STEL: 6.2 mg/m³;	STEL:	5 mg/m³; 10 mg/m³; S	TWA: 5 mg/m³;
Chemical name		France	Germany TRGS	Germany DFG	Gr	eece	Hungary
Citric acid 77-92-9		-	TWA-AGW; 2 mg/m³ (exposure factor 2); inhalable fraction	TWA-MAK: 2 mg/m³; I(2);inhalable fraction Peak: 4 mg/m³; respirable fraction		-	-
Triethanolamine 102-71-6		-	factor 1); inhalable fraction	TWA-MAK: 1 mg/m³; I(1);inhalable		-	-
Chemical name		Ireland	Italy MDLPS	Italy AIDII	La	atvia	Lithuania
Triethanolamine 102-71-6	5	A: 5 mg/m³; STEL: 15 ³ (calculated);	-	TWA: 5 mg/m³;		-	TWA-IPRD: 5 mg/m³; STEL-TPRD: 10 mg/m³; S
Chemical name	Lu	xembourg	Malta	Netherlands		rway	Poland
Triethanolamine 102-71-6		-	-	-	STI mg/m	5 mg/m³; EL: 10 ı³ (value ulated);	-
Chemical name		Portugal	Romania	Slovakia	Slo	venia	Spain
Triethanolamine 102-71-6	TWA	(VLE-MP): 5 mg/m³;	-	-		-	TWA-(VLA-ED): 5 mg/m³;
Chemical name		Sı	weden	Switzerland		Uni	ted Kingdom
Citric acid 77-92-9			-	TWA-MAK: 2 mg/m³; ir dust STEL-KZGW: 4 mg inhalable dust	g/m³;		-
Triethanolamine 102-71-6		TLV-NG STEL (Vägle m STEL (Vägle	SV: 5 mg/m³; SV: 0.8 ppm; edande KGV): 10 ng/m³; edande KGV): 1.6 ppm; Sk	TWA-MAK: 5 mg/m³; ir dust STEL-KZGW: 5 mg inhalable dust	nhalable - g/m³;		<u>-</u>

**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
Glycolic acid 79-14-1	-	80.769 mg/kg bw/day [4] [6]	14.811 mg/m <sup>3</sup> [4] [6] 12.944 mg/m <sup>3</sup> [4] [7] 2.157 mg/m <sup>3</sup> [5] [6] 12.944 mg/m <sup>3</sup> [5] [7]
Triethanolamine 102-71-6	-	7.5 mg/kg bw/day [4] [6] 140 µg/cm2 [5] [6]	1 mg/m³ [5] [6]

**Notes** 

[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
Glycolic acid 79-14-1	0.75 mg/kg bw/day [4] [6]	-	2.61 mg/m³ [4] [6] 2.3 mg/m³ [4] [7] 0.383 mg/m³ [5] [6] 2.3 mg/m³ [5] [7]
Triethanolamine 102-71-6	3.3 mg/kg bw/day [4] [6]	70 μg/cm2 [5] [6]	0.4 mg/m³ [5] [6]

**Notes** 

[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
Triethanolamine 102-71-6	0.32 mg/L	5.12 mg/L	0.032 mg/L	-	-

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
Glycolic acid 79-14-1	-	-	2.67 mg/L	-	-
Triethanolamine 102-71-6	1.7 mg/kg sediment dw	0.17 mg/kg sediment dw	10 mg/L	0.151 mg/kg soil dw	-

# 8.2. Exposure controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Personal protective equipment

Eye/face protection Eye protection must conform to standard EN 166. If splashes are likely to occur, wear safety

glasses with side-shields.

**Hand protection** Gloves must conform to standard EN 374. Wear suitable gloves.

Skin and body protection Protective clothing (e.g. Safety shoes acc. to EN ISO 20345, long-sleeved working clothing,

long trousers). Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

**Environmental exposure controls** Avoid release to the environment.

# SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance Clear, olive colored liquid

Physical state Liquid Yellow to olive

Odour No information available Odour threshold No information available

 Property
 Values

 Melting point / freezing point
 No data available

 Boiling point or initial boiling point
 No data available

and boiling range

Flammability No data available

Lower and upper explosion

limit/flammability limit

Upper explosion limitNo data availableLower explosion limitNo data available

Flash point > 200 °C

No data available **Autoignition temperature** No data available **Decomposition temperature** No data available SADT (°C) 2.5 solution (1 %) pН pH (as aqueous solution) No data available No data available Kinematic viscosity Dynamic viscosity No data available Water solubility No data available

**Solubility** Soluble in water

Partition coefficient n-octanol/water No data available

(log value)

Vapour pressureNo data availableDensity and/or relative densityNo data availableBulk densityNo data availableLiquid DensityNo data availableRelative vapour densityNo data available

**Particle characteristics** 

Particle SizeNo data availableParticle Size DistributionNo data available

9.2. Other information

Molecular weight No information available

VOC content None

Softening point No information available

#### 9.2.1. Information with regards to physical hazard classes

**Explosives** 

Explosive properties No information available Oxidising properties No information available

#### 9.2.2. Other safety characteristics

No information available

# SECTION 10: Stability and reactivity

10.1. Reactivity

**Reactivity** None 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 
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 None under normal use conditions.

### SECTION 11: Toxicological information

# 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Information on likely routes of exposure

#### **Product Information**

**Inhalation** Specific test data for the substance or mixture is not available. May cause irritation of

respiratory tract.

**Eye contact** Specific test data for the substance or mixture is not available. Causes serious eye irritation.

(based on components). May cause redness, itching, and pain.

**Skin contact** May cause slight irritation. 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. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhoea.

#### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** May cause redness and tearing of the eyes.

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

**Numerical measures of toxicity** 

The following ATE values have been calculated for the mixture:
ATEmix (oral)
8,640.20 mg/kg
ATEmix (inhalation-dust/mist)
28.20 mg/l

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Citric acid	= 3 g/kg (Rat)	> 2000 mg/kg (Rat)	-
Glycolic acid	= 1950 mg/kg (Rat)	-	> 5.2 mg/L (Rat) 4 h
·			= 3.6 mg/L (Rat) 4 h
Triethanolamine	= 4190 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	-

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

**Skin corrosion/irritation**Based on available data, the classification criteria are not met.

**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.

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

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

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

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

#### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

Endocrine disrupting properties Based on available data, the classification criteria are not met

#### 11.2.2. Other information

Other adverse effects No information available.

# **SECTION 12: Ecological information**

#### 12.1. Toxicity

#### **Ecotoxicity**

Harmful to aquatic life.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Citric acid	-	LC50: =1516mg/L (96h,	-	-
77-92-9		Lepomis macrochirus)		
Glycolic acid	-	LC50: >5000mg/L (96h,	-	-
79-14-1		Brachydanio rerio)		
Triethanolamine	EC50: =216mg/L (72h,	LC50: 10600 -	-	-
102-71-6	Desmodesmus	13000mg/L (96h,		
	subspicatus)	Pimephales promelas)		
	EC50: =169mg/L (96h,	LC50: >1000mg/L (96h,		
	Desmodesmus	Pimephales promelas)		
	subspicatus)	LC50: 450 - 1000mg/L		
		(96h, Lepomis		
		macrochirus)		

# 12.2. Persistence and degradability

Persistence and degradability

No information available.

### 12.3. Bioaccumulative potential

#### **Bioaccumulation**

**Component Information** 

· · · · · · · · · · · · · · · · · · ·				
Chemical name	Partition coefficient			
Citric acid	-1.72			
Glycolic acid	0.3			
Triethanolamine	-2.53			

# 12.4. Mobility in soil

Mobility in soil

No information available.

# 12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

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

Chemical name	PBT and vPvB assessment
Citric acid	Not PBT/vPvB
77-92-9	
Glycolic acid	Not PBT/vPvB
79-14-1	
Triethanolamine 102-71-6	Not PBT/vPvB

# 12.6. Endocrine disrupting properties

**Endocrine disrupting properties** Based on available data, the classification criteria are not met.

#### 12.7. Other adverse effects

Other adverse effects No information available.

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PMT or vPvM properties Based on available data, the classification criteria are not met.

# 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.

Not applicable

None

Contaminated packaging Do not reuse empty containers.

Waste codes / waste designations according to EWC / AVV

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application

for which the product was used.

# **SECTION 14: Transport information**

<u>IATA</u>	_	Not regulated
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 14.6 Special precautions for user

**Special Provisions** None

<u>IMDG</u>	Not regulated
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 Not applicable

14.6 Special precautions for user **Special Provisions** 

14.7 Maritime transport in bulk No information available

according to IMO instruments

<u>RID</u>		Not regulated
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 applicable
14.5	Environmental hazards	Not applicable

14.6 Special precautions for user

**Special Provisions** None

ADR		Not regulated
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	Not applicable

14.6 Special precautions for user **Special Provisions** 

None

<u>ADN</u>	Not regulated
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 applicable14.5 Environmental hazard Not applicable

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

#### **France**

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number
Triethanolamine - 102-71-6	RG 49

Germany

Water hazard class (WGK) slightly hazardous to water (WGK 1)

Chemical Prohibition Ordinance Not applicable

(ChemVerbotsV)

TRGS 905 Not applicable

#### Switzerland

Ordinance on the Incentive Tax on Volatile Organic Compounds (OVOC) SR 814.018
Storage of Hazardous Material
WPO (GSchV) SR 814.201; WPA (GSchG) SR 814.20
Major Accidents Ordinance SR 814.012
Not applicable

### **European Union**

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.

#### Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

The product contains one of more capetaines (c) cap	cot to recircular (regulation (20) recir	00172000 (11271011); 7 111110717111)
Chemical name	Restricted substance per REACH	Substance subject to authorisation per
	Annex XVII	REACH Annex XIV
Citric acid - 77-92-9	75	-

### **Persistent Organic Pollutants**

Not applicable

#### Ozone-depleting substances (ODS) regulation (EC) 2024/590

Not applicable.

Biocidal Products Regulation (EU) No 528/2012 (BPR)

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
	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 2: Disinfectants and algaecides not intended for direct application to humans or animals Product-type 3: Veterinary hygiene Product-type 4: Food and feed area

#### **Explosives Precursors Marketing and Use (2019/1148)**

Not applicable

#### **International Inventories**

Contact supplier for inventory compliance status

#### 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 any hazard and/or precautionary statements referred to under Sections 2-15

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

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

P280 - Wear protective gloves, protective clothing, eye protection and 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

P337 + P313 - If eye irritation persists: Get medical advice/attention

Legend

Logona		
ACGIH	American Conference of Governmental Industrial Hygienists	
AIDII	Italian Association of Industrial Hygienists	
ADN	Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
	(Europe)	
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road (Europe)	
AIIC	Australian Inventory of Industrial Chemicals	
ATE	Acute Toxicity Estimate	
ASTM	American Society for the Testing of Materials	
bar	Biological Reference Values for Chemical Compounds in the Work Area	
BAT	Biological tolerance values for occupational exposure	
BEL	Biological exposure limits	
bw	Body weight	
Ceiling	Maximum limit value	
CLP	Classification, Labelling and Packaging Regulation; Regulation (EC) No 1272/2008	
CMR	Carcinogen, Mutagen or Reproductive Toxicant	
DFG	German Research Foundation	
DOT	Department of Transportation (United States)	
DSL	Domestic Substances List (Canada)	
ECHA	European Chemicals Agency	
EC Number	European Community number	
EmS	Emergency Schedule	
ENCS	Existing and New Chemical Substances (Japan)	
EPA	Environmental Protection Agency	
EWC	European Waste Codes	
GHS	Globally Harmonized System	
IARC	International Agency for Research on Cancer	
IATA	International Air Transport Association	
IBC	International Code for the Construction and Equipment of Ships carrying Dangerous	
	Chemicals in Bulk	

la a	
ICAO	International Civil Aviation Organisation
IECSC	Inventory of Existing Chemical Substances in China
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
ISO	International Organisation for Standardisation
KECI	Korean Existing Chemicals Inventory
LC50	Lethal Concentration to 50% of a test population
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
MAL	Measuring Technical Hygienic Air Needs
MARPOL	International Convention for the Prevention of Pollution from Ships
MDLPS	Ministry of Labour and Social Policy
n.o.s.	Not Otherwise Specified
NOAEC	No Observed Adverse Effect Concentration
NOAEL	No Observed Adverse Effect Level
NOELR	No Observable Effect Loading Rate
NZIoC	New Zealand Inventory of Chemicals
OECD	Organization for Economic Cooperation and Development
OEL	Occupational exposure limits
PBT	Persistent, Bioaccumulative and Toxic substance
PICCS	Philippines Inventory of Chemicals and Chemical Substances
PMT	Persistent, Mobile and Toxic
PPE	Personal protective equipment
QSAR	Quantitative Structure Activity Relationship
REACH	Registration, Evaluation, Authorisation, and Restriction of Chemicals (REACH) Regulation
DID	(EC 1907/2006)
RID	Agreement concerning the International Carriage of Dangerous Goods by Rail (Europe)
SADT	Self-Accelerating Decomposition Temperature
SAR	Structure-activity relationship
SDS	Safety Data Sheet
SL	Surface Limit
STEL	Short Term Exposure Limit
STOT RE	Specific target organ toxicity - Repeated exposure
STOT SE	Specific target organ toxicity - Single exposure
SVHC	Substance of very high concern
TCSI	Taiwan Chemical Substance Inventory
TDG	Transport of Dangerous Goods (Canada)
TRGS	Technical Rule for Hazardous Substances
TSCA	Toxic Substances Control Act (United States)
TWA	Time-Weighted Average
UN	United Nations
VOC	Volatile organic compounds
vPvB	Very Persistent and Very Bioaccumulative
vPvM	Very Persistent and Very Mobile
As	Allergenic substance
DS	Dermal Sensitizer
Ot	Ototoxicant
pOt	Ototoxicant Ototoxicant - potential to cause hearing disorders
PS PS	Photosensitiser
RS	Respiratory Sensitiser
S	Sensitizer concluded coupling accountional authmo-
poS	Sensitizer - capable of causing occupational asthma
Sa	Simple asphyxiant
Sd	Skin designation
pSd	Skin designation - potential for cutaneous absorption
IO -I	Skin designation - vacated
Sdv Sk	Skin designation - vacated Skin notation

dSk	Skin notation - danger of cutaneous absorption
pSk	Skin notation - potential for cutaneous absorption

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	
Chronic aquatic toxicity	Calculation method	
Acute aquatic toxicity	Calculation method	
Aspiration hazard	Calculation method	
Ozone	Calculation method	

### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)

European Chemicals Agency (ECHA) (ECHA\_API)

**Environmental Protection Agency** 

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

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

Initial Release.

World Health Organization

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This safety data sheet complies with the requirements of Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No. 1907/2006

Disclaimer

**Revision Note** 

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**End of Safety Data Sheet**