

# 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 21-Mar-2024 Revision Number 1

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

### 1.1. Product identifier

**Product Code(s)** 1301; 1303; 1304; 1304-1; 1325; 1350

Product Name Tergazyme

Unique Formula Identifier (UFI) 0S90-10CR-S00Y-G8GH

Synonyms None

Pure substance/mixture Mixture

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

Recommended use Cleaning agent; 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

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

International: +1-813-248-0573

Emergency telephone - §45 - (E	3)1272/2008
Europe	112

# **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

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

Acute toxicity - Oral	Category 4 - (H302)
Skin irritation	Category 2 - (H315)
Eye irritation	Category 2 - (H319)

#### 2.2. Label elements

Contains Benzenesulfonic acid, mono-C10-16-alkyl derivs., sodium salts; Tetrasodium EDTA



Signal word Warning

#### **Hazard statements**

H302 - Harmful if swallowed.

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

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

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

P280 - Wear protective gloves, 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.

P321 - Specific treatment (see information on this label).

P501 - Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable.

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

### **Additional information**

This product requires tactile warnings if supplied to the general public.

### 2.3. Other hazards

Other hazards No information available.

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	M-Factor (long-ter m)	Notes
Sodium bicarbonate 144-55-8	45-50	No data available	205-633-8	[C]	1	ı	1	-
Benzenesulfonic acid, mono-C10-16-alkyl derivs., sodium salts 68081-81-2		-	268-356-1	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)	-	-		-
Sodium carbonate 497-19-8	7-13	No data available	207-838-8 (011-005-00-2)	Eye Irrit. 2 (H319)	1	ı	1	-
Tetrasodium EDTA 64-02-8	0.1-1	No data available	200-573-9 (607-428-00-2)	Acute Tox. 4 (H302) Eye Dam. 1 (H318)	-	-	-	-

Subtilisin	0.042	No data	232-752-2	Skin Irrit. 2 (H315)	-	-	-	-
9014-01-1		available	(647-012-00-8)	Eye Dam. 1 (H318)				
				Resp. Sens. 1				
				(H334)				
				STOT SE 3 (H335)				

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

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg		Inhalation LC50 - 4 hour - vapour - mg/L	
Sodium bicarbonate 144-55-8	4220	2002	No data available	No data available	No data available
Sodium carbonate 497-19-8	4090	2002	1.15	No data available	No data available
Tetrasodium EDTA 64-02-8	1658	No data available	No data available	No data available	No data available
Subtilisin 9014-01-1	3700	No data available	No data available	No data available	No data available

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

persists.

**Skin contact** Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical

attention if irritation develops and persists.

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

person. 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.

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

#### 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

chemical

No information available.

Hazardous combustion products Carbon oxides. Sodium 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. Ensure adequate ventilation. Use personal

protective equipment as required.

**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. 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 Avoid breathing dusts or mists. 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. Take off contaminated clothing and wash it before reuse.

General hygiene considerations Avoid breathing dusts or mists. Wear suitable gloves and eye/face protection. Do not eat,

drink or smoke when using this product. Avoid contact with skin, eyes or clothing.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach

of children.

Storage class (TRGS 510) LGK 11.

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
Subtilisin		-	-	-		-	TWA-GVI:
9014-01-1							0.00004 mg/m³;
							Sk RS
Chemical name		Cymrus	Czech Republic	Denmark	Го	tonia	Finland
Sodium bicarbonate		Cyprus	TWA: 5 mg/m <sup>3</sup> ;	Denmark	E8	stonia	rinianu
144-55-8		-	Ceiling: 10 mg/m³;	.		-	-
Sodium carbonate		_	TWA: 5 mg/m <sup>3</sup> ;	_		_	-
497-19-8			Ceiling: 10 mg/m <sup>3</sup> ;				
Subtilisin		-	-	Ceiling: 0.00006		1 glycine	-
9014-01-1				mg/m³;		it/m³;	
						3 glycine	
					un 	it/m³; S	
Chemical name		France	Germany TRGS	Germany DFG	Gr	eece	Hungary
Subtilisin		-	-	RŚ		-	-
9014-01-1							
Chemical name		Ireland	Italy MDLPS	Italy AIDII		atvia	Lithuania
Sodium bicarbonate		-	-	-	TWA:	5 mg/m³;	-
144-55-8				0 " 0 00000			
Subtilisin		A: 0.00006	-	Ceiling: 0.00006		-	-
9014-01-1		mg/m³; STEL:		mg/m³;			
	0.00	006 mg/m <sup>3</sup> ;					
Chemical name		Portugal	Romania	Slovakia	Slo	venia	Spain
Sodium carbonate		-	TWA: 1 mg/m <sup>3</sup> ;	-		-	-
497-19-8			STEL: 3 mg/m <sup>3</sup> ;				
Subtilisin	Ceilir	g (VLE-CM):	-	-		-	STEL (VLA-EC):
9014-01-1	0.00	0006 mg/m³;					0.00006 mg/m <sup>3</sup> ;
							S
Chemical name		~ .	weden	Switzerland			ted Kingdom
Subtilisin				STEL-KZGW: 0.00006	mg/m³;		0.00004 mg/m³;
9014-01-1			de KGV): 3 glycine			0.00012 mg/m³;	
		ur	nit/m³;				poS
			J				

### **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
Tetrasodium EDTA 64-02-8	-	-	1.5 mg/m³ [4] [6] 3 mg/m³ [4] [7] 1.5 mg/m³ [5] [6] 3 mg/m³ [5] [7]

**Notes** 

[4] Systemic health effects.

[6] Long term. [7] Short term.

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

Chemical name	Oral	Dermal	Inhalation
Tetrasodium EDTA 64-02-8	25 mg/kg bw/day [4] [6]	-	0.6 mg/m³ [5] [6] 1.2 mg/m³ [5] [7]
Subtilisin 9014-01-1	2.86 mg/kg bw/day [4] [6] 17.28 mg/kg bw/day [4] [7]	-	-

**Notes** 

[4] Systemic 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
Tetrasodium EDTA 64-02-8	2.83 mg/L	1 mg/L	0.283 mg/L	1 mg/L	-
Subtilisin 9014-01-1	1.7 µg/L	0.9 μg/L	0.17 μg/L	-	-

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
Tetrasodium EDTA 64-02-8	-	-	50 mg/L	1.1 mg/kg soil dw	-
Subtilisin 9014-01-1	-	-	65000 μg/L	568 μg/kg soil dw	-

### 8.2. Exposure controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Revision date: 21-Mar-2024 Tergazyme

Personal protective equipment

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

glasses with side-shields.

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

Skin and body protection Wear suitable protective clothing. Long sleeved clothing.

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

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

No data available

**Environmental exposure controls** No information available.

# SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

**Appearance** Powder Physical state Solid Colour Off-white

Odour No information available **Odour threshold** No information available

Remarks • Method Property Values No data available Melting point / freezing point No data available

Boiling point or initial boiling point

and boiling range

**Flammability** No data available

Lower and upper explosion

limit/flammability limit

No data available **Upper explosion limit** Lower explosion limit No data available Flash point No data available **Autoignition temperature** No data available **Decomposition temperature** No data available No data available SADT (°C) рH 9.5 solution (1 %) pH (as aqueous solution) No data available No data available Kinematic viscosity No data available Dynamic viscosity

Solubility Soluble in water

No data available Partition coefficient n-octanol/water

(log value)

Water solubility

Vapour pressure No data available Density and/or relative density No data available **Bulk density** No data available No data available **Liquid Density** Relative vapour density No data available

**Particle characteristics** 

**Particle Size** No data available **Particle Size Distribution** No data available

9.2. Other information

No information available Molecular weight

VOC content

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** Strong acids. Strong bases. Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

### 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** Specific test data for the substance or mixture is not available. Causes skin irritation. (based

on components).

**Ingestion** Specific test data for the substance or mixture is not available. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhoea. Harmful if swallowed. (based on

components).

Symptoms related to the physical, chemical and toxicological characteristics

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

Acute toxicity Harmful if swallowed.

**Numerical measures of toxicity** 

The following ATE values have been calculated for the mixture:

ATEmix (oral) 1,968.60 mg/kg ATEmix (dermal) 3,440.40 mg/kg

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium bicarbonate	= 4220 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
Sodium carbonate	= 4090 mg/kg (Rat)	>2000 mg/kg (Rabbit)	= 2300 mg/m <sup>3</sup> (Rat) 2 h
Tetrasodium EDTA	= 1658 mg/kg (Rat)	-	-
Subtilisin	= 3700 mg/kg (Rat)	-	<del>-</del>

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

**Skin corrosion/irritation** Classification based on data available for ingredients. Causes skin irritation.

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

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

**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** 

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sodium bicarbonate 144-55-8	-	LC50: 8250 - 9000mg/L (96h, Lepomis macrochirus)	-	EC50: =2350mg/L (48h, Daphnia magna)
Sodium carbonate 497-19-8	-	LC50: =300mg/L (96h, Lepomis macrochirus) LC50: 310 - 1220mg/L (96h, Pimephales promelas)	-	EC50: =265mg/L (48h, Daphnia magna)
Tetrasodium EDTA 64-02-8	-	LC50: =41mg/L (96h, Lepomis macrochirus) LC50: =59.8mg/L (96h, Pimephales promelas)	-	-

### 12.2. Persistence and degradability

Persistence and degradability

No information available.

### 12.3. Bioaccumulative potential

#### **Bioaccumulation**

**Component Information** 

-		
	Chemical name	Partition coefficient
	Subtilisin	-3.1

### 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
Sodium bicarbonate	Not PBT/vPvB
144-55-8	
Sodium carbonate 497-19-8	Not PBT/vPvB
Tetrasodium EDTA 64-02-8	Not PBT/vPvB
Subtilisin 9014-01-1	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.

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.

**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**

<b>IATA</b>	_	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	
S	pecial 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

Marine pollutant indicator

14.6 Special precautions for user

Special Provisions None

**14.7 Maritime transport in bulk** No information available according to IMO instruments

NP

<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
146	Special precautions for user	

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

ADN
14.1 UN number or ID number
14.2 UN proper shipping name
14.3 Transport hazard class(es)

Not regulated
Not regulated
Not regulated
Not regulated
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

Germany

Water hazard class (WGK) Chemical Prohibition Ordinance 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)

	Chemical name	Restricted substance per REACH	Substance subject to authorisation per
		Annex XVII	REACH Annex XIV
ĺ	Sodium carbonate - 497-19-8	75	-
	Tetrasodium EDTA - 64-02-8	75	-
	Subtilisin - 9014-01-1	75	-

### **Persistent Organic Pollutants**

Not applicable

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

Not applicable.

EU - Plant Protection Products (1107/2009/EC)

EO - Hant Hotection Houdets (Houzous/EO)		
Chemical name	EU - Plant Protection Products (1107/2009/EC)	
Sodium bicarbonate - 144-55-8	Plant protection agent	

### 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

H302 - Harmful if swallowed

H315 - Causes skin irritation

H318 - Causes serious eye damage

H319 - Causes serious eye irritation

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H335 - May cause respiratory irritation

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

P270 - Do not eat, drink or smoke when using this product

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

P330 - Rinse mouth

P501 - Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable

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

P302 + P352 - IF ON SKIN: Wash with plenty of water and soap

P321 - Specific treatment (see supplemental first aid instructions on this label)

P332 + P313 - If skin irritation occurs: Get medical advice/attention

P362 + P364 - Take off contaminated clothing and wash it before reuse

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

ACGIH		
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 Ro		
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 127		
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	

In the		
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	
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 Observed Adverse Linect Level  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 (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 - potential to cause hearing disorders	
PS	Photosensitiser	
RS	Respiratory Sensitiser	
S		
poS	Sensitizer - capable of causing occupational asthma	
F	position supulies of successing social and the succession successi	

Sa	Simple asphyxiant
Sd Skin designation	
pSd Skin designation - potential for cutaneous absorption	
Sdv	Skin designation - vacated
Sk	Skin notation
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	On basis of test data	
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

World Health Organization

Issuing Date 21-Mar-2024

Revision date 21-Mar-2024

**Revision Note** 

Initial Release.

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**

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**