

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 19-Mar-2024 **Revision Number** 1

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

1.1. Product identifier

Product Code(s) 2001;2001-1; 2005; 2015; 2055

Product Name Citrajet

Unique Formula Identifier (UFI) GW80-Y0FS-R000-UUPH

None **Synonyms**

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

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

Skin irritation Category 2 - (H315)

2.2. Label elements



Signal word Warning

Hazard statements

H315 - Causes skin irritation.

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

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

P280 - Wear protective gloves.

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

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

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

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 (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	5-10	No data available	201-180-5	No data available	-	-	-	-
Triethanolamine 102-71-6	3-7	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

[[]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. Get medical attention immediately if symptoms occur.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids.

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 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 No information available.

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 i

No information available.

chemical

Hazardous combustion products Carbon oxides. Nitrogen oxides (NOx).

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.

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 Avoid release to the environment.

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. Take off

contaminated clothing and wash it before reuse.

General hygiene considerations 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		-	TWA-TMW:	TWA: 5 mg/m ³ ;		-	-
102-71-6			0.8 ppm;				
			TWA-TMW:				
			5 mg/m³; inhalable fraction				
			STEL-KZGW: 1.6				
			ppm (4 X 15 min);				
			STEL-KZGW: 10				
			mg/m³ (4 X 15 min)	;			
			inhalable fraction S				
Chemical name		Cyprus	Czech Republic	Denmark	Es	tonia	Finland
Citric acid		-	TWA: 4 mg/m³; dus			-	-
77-92-9			3 ,				
Triethanolamine		-	TWA: 5 mg/m ³ ;	TWA: 0.5 ppm;		5 mg/m³;	TWA: 5 mg/m ³ ;
102-71-6			Ceiling: 10 mg/m ³ ;	TWA: 3.1 mg/m ³ ;	STEL:	10 mg/m³;	
			pSk	STEL: 1 ppm;		S	
Chemical name		France	Germany TRGS	STEL: 6.2 mg/m ³ ; Germany DFG	Gr	eece	Hungary
Citric acid		-	TWA-AGW;	TWA-MAK: 2	01	-	- rungary
77-92-9				mg/m ³ ; I(2);inhalable			
			factor 2); inhalable				
			fraction	Peak: 4 mg/m ³ ;			
				respirable fraction			
Triethanolamine		-	TWA-AGW;	TWA-MAK: 1		-	-
102-71-6			factor 1); inhalable	mg/m ³ ; I(1);inhalable fraction			
			fraction	Peak: 1 mg/m ³ ;			
				inhalable fraction			
Chemical name		Ireland	Italy MDLPS	Italy AIDII	La	atvia	Lithuania
Triethanolamine		A: 5 mg/m ³ ;	-	TWA: 5 mg/m ³ ;		-	TWA-IPRD: 5
102-71-6		STEL: 15					mg/m³;
	mg/m	³ (calculated);					STEL-TPRD: 10 mg/m³;
							S I
Chemical name	Lu	xembourg	Malta	Netherlands	No	rway	Poland
Triethanolamine		-	-	-	TWA:	5 mg/m³;	-
102-71-6						EL: 10	
					_	³ (value	
Chemical name		Portugal	Romania	Slovakia		ulated); venia	Spain
Triethanolamine		(VLE-MP): 5	- Nomania	- Siovania	310	-	TWA-(VLA-ED): 5
102-71-6		mg/m^3 ;					mg/m ³ ;
Chemical name			weden	Switzerland		Uni	ted Kingdom
Citric acid				ΓWA-MAK: 2 mg/m³; ir	nhalable		-
77-92-9				dust			
				STEL-KZGW: 4 mg			
Triethanolamine		TI \/ NIC	6V: 5 mg/m³;	inhalable dust FWA-MAK: 5 mg/m³; ir			
102-71-6			6V: 0.8 ppm;	i vvA-iviAK. 5 mg/m², ii dust	ıı ıaıavı c		-
102 71 0			edande KGV): 10	STEL-KZGW: 5 mg	g/m³;		
			ng/m³;	inhalable dust			
			dande KGV): 1.6				
			opm;				
			Sk				

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/m³ [4] [6] 12.944 mg/m³ [4] [7] 2.157 mg/m³ [5] [6] 12.944 mg/m³ [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	Marine water	Marine water	Air
		(intermittent release)		(intermittent release)	
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.

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

Skin and body protection (EN ISO 6529). Wear suitable protective clothing. Long sleeved clothing.

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

Physical state Liquid

ColourTransparent Light yellow liquidOdourNo information availableOdour thresholdNo information available

PropertyValuesRemarks • MethodMelting point / freezing pointNo data availableBoiling point or initial boiling pointNo 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

Autoignition temperature

Decomposition temperature
SADT (°C)

PH
2.5

No data available
No data available
No data available
solution (1 %)
No data available

pH 2.5 solution (1 %)
pH (as aqueous solution)
Kinematic viscosity
Dynamic viscosity
No data available
Water solubility
No data available
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 0%

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 avoidNone 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.

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.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. 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)

8,952.40 mg/kg

ATEmix (inhalation-dust/mist)

29.60 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 Classification based on data available for ingredients. Causes skin irritation.

Serious eye damage/eye irritation Based on available data, the classification criteria are not met.

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 exposureBased 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	Crustacea
011.1		1.050 4540 # (00)	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

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

Chemical name	PBT and vPvB assessment
Citric acid 77-92-9	Not PBT/vPvB
Glycolic acid 79-14-1	Not PBT/vPvB
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.

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.

Do not reuse empty containers. Contaminated packaging

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

4.4 Packing group Not regulated 14.5 Environmental hazards Not applicable

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

None

No information available according to IMO instruments

RID		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

ADN Not regulated 14.1 UN number or ID number Not regulated Not regulated 14.2 UN proper shipping name Not regulated 14.3 Transport hazard class(es) 14.4 Packing group Not applicable

14.5 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 ha

Chemical Prohibition Ordinance

(ChemVerbotsV)

slightly hazardous to water (WGK 1)

Not applicable

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 Annex XVII	Substance subject to authorisation per 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)
Citric acid - 77-92-9	Product-type 2: Disinfectants and algaecides not intended
	for direct application to humans or animals Product-type 6:
	Preservatives for products during storage
Glycolic acid - 79-14-1	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

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

Legend

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	
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)	ACH) Regulation
(EČ 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	
VOC Volatile organic compounds VPVB Very Persistent and Very Bioaccumulative	
vPvB Very Persistent and Very Bioaccumulative	
VPvB Very Persistent and Very Bioaccumulative vPvM Very Persistent and Very Mobile	
VPVB Very Persistent and Very Bioaccumulative VPVM Very Persistent and Very Mobile As Allergenic substance	
VPVB Very Persistent and Very Bioaccumulative VPVM Very Persistent and Very Mobile As Allergenic substance DS Dermal Sensitizer	
VPVB Very Persistent and Very Bioaccumulative VPVM Very Persistent and Very Mobile As Allergenic substance DS Dermal Sensitizer Ot Ototoxicant	
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	
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	
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	
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 Sensitiser	
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 Sensitiser poS Sensitizer - capable of causing occupational asthma	
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 Sensitiser poS Sensitizer - capable of causing occupational asthma Sa Simple asphyxiant	
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 Sensitiser poS Sensitizer - capable of causing occupational asthma Sa Simple asphyxiant Sd Skin designation	
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 Sensitiser poS Sensitizer - capable of causing occupational asthma Sa Simple asphyxiant Sd Skin designation pSd Skin designation - potential for cutaneous absorption	
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 Sensitiser poS Sensitizer - capable of causing occupational asthma Sa Simple asphyxiant Sd Skin designation Sdv Skin designation - potential for cutaneous absorption Sdv Skin designation - vacated	
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 Sensitiser poS Sensitizer - capable of causing occupational asthma Sa Simple asphyxiant Sd Skin designation pSd Skin designation - potential for 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	On basis of test data	
Serious eye damage/eye irritation	On basis of test data	
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 19-Mar-2024

Revision date 19-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