

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date 22-Feb-2023

Revision Number 1

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

### 1.1. Product identifier

**Product Name** ACARITHINE 20  
**Product Code(s)** TP.7001.V.1\_\_\_ISR  
**Chemical name** Permethrin 200 EC  
**Pure substance/mixture** Mixture

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

**Recommended use** Insecticide; For professional users only  
**Uses advised against** No information available

### 1.3. Details of the supplier of the safety data sheet

Tapazol Chemical Works Ltd.  
1st HaSolela st.  
West. Ind. Zone  
Beit Shemesh, Israel 9905415  
Tel:+972-2-992-6040  
Fax: +972-2-9926050  
For further information, please contact [sds@tapazol.co.il](mailto:sds@tapazol.co.il)

### 1.4. Emergency telephone number

**Emergency Telephone** +972 4 777 1900  
National Institute for Information on Poisoning  
Rambam Health Care Campus, Haifa, Israel

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

<b>Acute toxicity - Inhalation (Dusts/Mists)</b>	Category 4 - (H332)
<b>Serious eye damage/eye irritation</b>	Category 1 - (H318)
<b>Skin sensitization</b>	Category 1 - (H317)
<b>Acute aquatic toxicity</b>	Category 1 - (H400)
<b>Chronic aquatic toxicity</b>	Category 1 - (H410)
<b>Flammable liquids</b>	Category 3 - (H226)

### 2.2. Label elements

**Signal word**

Danger

**Hazard statements**

H226 - Flammable liquid and vapor

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H332 - Harmful if inhaled

H410 - Very toxic to aquatic life with long lasting effects

EUH401 - To avoid risks to human health and the environment, comply with the instructions for use

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

P102 - Keep out of reach of children

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P302 + P352 - IF ON SKIN: Wash with plenty of water/...

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/physician

P391 - Collect spillage

P403 + P235 - Store in a well-ventilated place. Keep cool

P501 - Dispose of contents/ container to an approved waste disposal plant

**Additional information**

SP1 - Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).

**2.3. Other hazards****Endocrine Disruptor Information**

Chemical name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances
Permethrin (ISO)	Group III Chemical	-
4-Nonylphenol branched, ethoxylated	Group III Chemical	-

**SECTION 3: Composition/information on ingredients****3.1 Substances**

Not applicable

**3.2 Mixtures**

Chemical name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Permethrin (ISO)	258-067-9	52645-53-1	20	Acute tox. 4 (H302) Acute tox. 4 (H332) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) M = 10000
Xylene	215-535-7	1330-20-7	68-76	Acute Tox. 4 (H312)

				Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Flam. Liq. 3 (H226)
4-Nonylphenol branched, ethoxylated	-	127087-87-0	3-5	Acute Tox. 4 (H302) Acute Tox. 4 (H332) Eye Dam. 1 (H318) Aquatic Chronic 2 (H411)
Benzenesulfonic acid, C10-13-alkyl calcium salt	-	932-231-6	2-4	Skin irrit. 2 (H315) Eye dam.1 (H318) Aquatic Chronic 3 (H412)
2-ethylhexan-1-ol	203-234-3	104-76-7	1-3	Skin irrit. 2 (H315) Eye Irrit.2 (H319) Acute Tox.4 (H332) STOT SE 3 (H335)

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

This product contains one or more candidate substance(s) of very high concern (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Chemical name	CAS No	SVHC candidates
4-Nonylphenol branched, ethoxylated	127087-87-0	X

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

<b>Inhalation</b>	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Immediate medical attention is required.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. Immediately call a POISON CENTER or doctor.
<b>Skin contact</b>	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water.
<b>Self-protection of the first aider</b>	First aider: Pay attention to self-protection. Remove all sources of ignition. Wear personal protective clothing (see section 8).

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

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

**Note to physicians** Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Small Fire</b>	Dry chemical, CO <sub>2</sub> , water spray or regular foam.
<b>Large Fire</b>	Water spray, fog or regular foam Dike fire-control water for later disposal Move containers from fire area if you can do it without risk

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

## **5.2. Special hazards arising from the substance or mixture**

### **5.3. Advice for firefighters**

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Ensure adequate ventilation.

**For emergency responders** Use personal protection recommended in Section 8.

### **6.2. Environmental precautions**

**Environmental precautions** See Section 12 for additional Ecological Information.

### **6.3. Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Take up mechanically, placing in appropriate containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

### **6.4. Reference to other sections**

**Reference to other sections** See section 8 for more information. See section 13 for more information.

## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

**Advice on safe handling** Ensure adequate ventilation.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

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

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

### **7.3. Specific end use(s)**

**Risk Management Methods (RMM)** The information required is contained in this Safety Data Sheet.

## **SECTION 8: Exposure controls/personal protection**

### **8.1. Control parameters**

**Exposure Limits**

Chemical name	European Union	Austria	Belgium	Netherlands	Bulgaria
Xylene 1330-20-7	TWA: 50 ppm TWA: 221 mg/m <sup>3</sup> STEL: 100 ppm STEL: 442 mg/m <sup>3</sup> *	TWA: 50 ppm TWA: 221 mg/m <sup>3</sup> STEL 100 ppm STEL 442 mg/m <sup>3</sup>	TWA: 50 ppm TWA: 221 mg/m <sup>3</sup> STEL: 100 ppm STEL: 442 mg/m <sup>3</sup> *	TWA: 210 mg/m <sup>3</sup> STEL: 442 mg/m <sup>3</sup> H*	STEL: 100 ppm STEL: 442 mg/m <sup>3</sup> TWA: 50 ppm TWA: 221.0 mg/m <sup>3</sup> K*
2-ethylhexan-1-ol 104-76-7	-	TWA: 1 ppm TWA: 5.4 mg/m <sup>3</sup> STEL 2 ppm STEL 10.8 mg/m <sup>3</sup>	TWA: 1 ppm TWA: 5.4 mg/m <sup>3</sup> *	TWA: 5.4 mg/m <sup>3</sup>	TWA: 5.4 mg/m <sup>3</sup> TWA: 1 ppm
Chemical name	Denmark	Germany	France	United Kingdom	Spain
Xylene 1330-20-7	TWA: 25 ppm TWA: 109 mg/m <sup>3</sup> H*	TWA: 100 ppm TWA: 440 mg/m <sup>3</sup> H*	TWA: 50 ppm TWA: 221 mg/m <sup>3</sup> STEL: 100 ppm STEL: 442 mg/m <sup>3</sup> *	TWA: 50 ppm TWA: 220 mg/m <sup>3</sup> STEL: 100 ppm STEL: 441 mg/m <sup>3</sup> Sk*	TWA: 50 ppm TWA: 221 mg/m <sup>3</sup> STEL: 100 ppm STEL: 442 mg/m <sup>3</sup> vía dérmica*
2-ethylhexan-1-ol 104-76-7	TWA: 1 ppm TWA: 5.4 mg/m <sup>3</sup> H*	TWA: 10 ppm TWA: 54 mg/m <sup>3</sup>	TWA: 50 ppm TWA: 270 mg/m <sup>3</sup>	TWA: 1 ppm TWA: 5.4 mg/m <sup>3</sup> STEL: 3 ppm STEL: 16.2 mg/m <sup>3</sup>	TWA: 1 ppm TWA: 1.54 mg/m <sup>3</sup> vía dérmica*

### Biological occupational exposure limits

Chemical name	European Union	Austria	Bulgaria	Croatia	Czech Republic
Xylene 1330-20-7	-	1.5 g/L (urine - Methylhippuric acid after end of work day, at the end of a work week/end of the shift)	-	1.50 mg/L - blood (Xylene) - at the end of the work shift 1.50 g/g Creatinine - urine (Methylhippuric acid) - at the end of the work shift	820 µmol/mmol Creatinine (urine - Methylhippuric acid end of shift) 1400 mg/g Creatinine (urine - Methylhippuric acid end of shift)
Chemical name	Denmark	Finland	France	Germany	Germany MAK
Xylene 1330-20-7	-	5.0 mmol/L (urine - Methylhippuric acid after the shift)	1500 mg/g creatinine - urine (Methylhippuric acid) - end of shift	2000 mg/L (urine - Methylhippuric(tolur- )acid (all isomers) end of shift) 2000 mg/L - BAT (end of exposure or end of shift) urine	2000 mg/L (urine - Methylhippuric(tolur- )acid (all isomers) end of shift)
Chemical name	Hungary	Ireland	Italy	Italy REL	
Xylene 1330-20-7	-	1.5 g/g Creatinine (urine - Methylhippuric acids end of shift)	-	1.5 g/g Creatinine - urine (Methylhippuric acid) - end of shift	
Chemical name	Latvia	Luxembourg	Romania	Slovakia	
Xylene 1330-20-7	-	-	3 g/L - urine (Methylhippuric acid) - end of shift	1.5 mg/L - blood (Xylene) - end of exposure or work shift 2000 mg/L - urine (Methylhippuric acid) - end of exposure or work shift	
Chemical name	Slovenia	Spain	Switzerland	United Kingdom	
Xylene 1330-20-7	2 g/L - urine (Methylpuric acid (all isomers)) - at the end of the work shift	1 g/g Creatinine (urine - Methylhippuric acids end of shift)	2 g/L (urine - Methylhippuric acid end of shift)	650 mmol/mol creatinine - urine (Methyl hippuric acid) - post shift	

### 8.2. Exposure controls

**Personal protective equipment**

<b>Eye/face protection</b>	Safety glasses with side shields are recommended for medical or industrial exposures.
<b>Skin and body protection</b>	Protective shoes or boots. Wear fire/flamm resistant/retardant clothing.
<b>Respiratory protection</b>	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practice.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid
<b>Color</b>	light yellow
<b>Odor</b>	Aromatic Hydrocarbons.

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	4.0 - 7.0	
<b>pH (as aqueous solution)</b>		
<b>Melting point / freezing point</b>		
<b>Boiling point / boiling range</b>		
<b>Flash point</b>	> 40 °C	
<b>Evaporation rate</b>	No data available.	
<b>Flammability (solid, gas)</b>	No data available.	
<b>Flammability Limit in Air</b>		
<b>Upper flammability or explosive limits</b>	No data available.	
<b>Lower flammability or explosive limits</b>	No data available.	
<b>Vapor pressure</b>	No data available.	
<b>Vapor density</b>	No data available.	
<b>Relative density</b>	0.9 - 1.0	
<b>Water solubility</b>	< 0.02 ppm	
<b>Solubility(ies)</b>	No data available.	
<b>Partition coefficient</b>	No data available.	
<b>Autoignition temperature</b>	No data available.	
<b>Decomposition temperature</b>		
<b>Kinematic viscosity</b>	No data available.	
<b>Dynamic viscosity</b>	No data available.	

**9.2. Other information****SECTION 10: Stability and reactivity****10.1. Reactivity****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 known based on information supplied.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects**

**Oral LD50** >2000 mg/kg. Based on available data, the classification criteria are not met.

**Dermal LD50** >2000 mg/kg. Based on available data, the classification criteria are not met.

**Inhalation LC50** Acute Tox. 4 - H332. Classification based on calculation method

**Skin corrosion/irritation** Non-irritating to the skin. Based on available data, the classification criteria are not met.

**Serious eye damage/eye irritation** H318 - Causes serious eye damage. Classification based on test data.

**Respiratory or skin sensitization** H317 - May cause an allergic skin reaction. Classification based on test data.

**Germ cell mutagenicity** Not classified. Based on calculation method classification criteria are not met.

Chemical name	European Union
Permethrin (ISO)	Not classified
Xylene	Not classified
4-Nonylphenol branched, ethoxylated	Not classified
Benzenesulfonic acid, C10-13-alkyl calcium salt	Not classified
2-ethylhexan-1-ol	Not classified

**Carcinogenicity** Not classified. Based on calculation method classification criteria are not met.

Chemical name	European Union
Permethrin (ISO)	Not classified
Xylene	Not classified
4-Nonylphenol branched, ethoxylated	Not classified
Benzenesulfonic acid, C10-13-alkyl calcium salt	Not classified
2-ethylhexan-1-ol	Not classified

**Reproductive toxicity** Not classified. Based on calculation method classification criteria are not met.

Chemical name	European Union
Permethrin (ISO)	Not classified
Xylene	Not classified
4-Nonylphenol branched, ethoxylated	Not classified
Benzenesulfonic acid, C10-13-alkyl calcium salt	Not classified
2-ethylhexan-1-ol	Not classified

**STOT - single exposure** Not classified. Based on calculation method classification criteria are not met.

**STOT - repeated exposure** Not classified. Based on calculation method classification criteria are not met.

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

## SECTION 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity** H400 - Very toxic to aquatic life.  
Classification based on calculation method.  
H410 - Very toxic to aquatic life with long lasting effects.  
Classification based on calculation method.  
Toxic to honeybees.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Permethrin (ISO)	Acute toxicity: EC50 = 0.0125 mg/l; Chronic toxicity: NOEC = 0.0009 mg/l	Acute toxicity: LC50 = 0.0125 mg/l; Chronic toxicity: NOEC = 0.000093 mg/l	-	Acute toxicity: LC50 = 0.00002 mg/l; Chronic toxicity: NOEC = 0.0029 mg/l

### 12.2. Persistence and degradability

**Persistence and degradability** Not be expected to persist in soil or water systems [Permethrin].

### 12.3. Bioaccumulative potential

**Bioaccumulation** Threshold for concern [Permethrin].

**Bioconcentration factor (BCF)** 300 L/Kg

#### Component Information

Chemical name	Partition coefficient
Permethrin (ISO)	Log P = 6.1 (at pH 7, 20 °C)
Xylene	2.77 - 3.15

### 12.4. Mobility in soil

**Mobility in soil** Non-mobile in soil [Permethrin].

### 12.5. Results of PBT and vPvB assessment

**PBT and vPvB assessment** The components in formulation do not meet the criteria for classification as PBT or vPvB.

Chemical name	PBT and vPvB assessment
Permethrin (ISO)	The substance is not PBT / vPvB
Xylene	The substance is not PBT / vPvB
4-Nonylphenol branched, ethoxylated	The substance is not PBT / vPvB
Benzenesulfonic acid, C10-13-alkyl calcium salt	The substance is not PBT / vPvB
2-ethylhexan-1-ol	The substance is not PBT / vPvB

### 12.6. Other adverse effects

#### Endocrine Disruptor Information

Chemical name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances
Permethrin (ISO)	Group III Chemical	-
4-Nonylphenol branched, ethoxylated	Group III Chemical	-

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

**SECTION 14: Transport information****IMDG**

14.1 UN number 1993  
 14.2 UN proper shipping name Flammable liquid, n.o.s. [Xylene]  
 14.3 Transport hazard class(es) 3  
 14.4 Packing group III  
 14.5 Marine pollutant Yes  
     Environmental hazards Yes  
 14.6 Special precautions for user  
     Special Provisions None  
 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

**RID**

14.1 UN number 1993  
 14.2 UN proper shipping name Flammable liquid, n.o.s. [Xylene]  
 14.3 Transport hazard class(es) 3  
 14.4 Packing group III  
 14.5 Environmental hazards Yes  
 14.6 Special precautions for user  
     Special Provisions None

**ADR**

14.1 UN number 1993  
 14.2 UN proper shipping name Flammable liquid, n.o.s. [Xylene]  
 14.3 Transport hazard class(es) 3  
 14.4 Packing group III  
 14.5 Environmental hazards Yes  
 14.6 Special precautions for user  
     Special Provisions None

**IATA**

14.1 UN number 1993  
 14.2 UN proper shipping name Flammable liquid, n.o.s. [Xylene]  
 14.3 Transport hazard class(es) 3  
 14.4 Packing group III  
 14.5 Environmental hazards Yes  
 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	Title
Xylene	RG 4bis, RG 84	-

1330-20-7		
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**Germany**

**Water hazard class (WGK)** strongly hazardous to water (WGK 3)

**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

**Authorizations and/or restrictions on use:**

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

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorization per REACH Annex XIV
4-Nonylphenol branched, ethoxylated - 127087-87-0		X

**Persistent Organic Pollutants**

Not applicable

**Export Notification requirements**

This product contains substances which are regulated pursuant to Regulation (EC) No. 649/2012 of the European parliament and of the council concerning the export and import of dangerous chemicals

Chemical name	European Export/Import Restrictions per (EC) 689/2008 - Annex Number
Permethrin (ISO) - 52645-53-1	I.1
4-Nonylphenol branched, ethoxylated - 127087-87-0	I.1 I.2

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009** Not applicable

**International Inventories**

<b>TSCA</b>	Contact supplier for inventory compliance status
<b>DSL/NDSL</b>	Contact supplier for inventory compliance status
<b>EINECS/ELINCS</b>	Contact supplier for inventory compliance status
<b>ENCS</b>	Contact supplier for inventory compliance status
<b>IECSC</b>	Contact supplier for inventory compliance status
<b>KECL</b>	Contact supplier for inventory compliance status
<b>PICCS</b>	Contact supplier for inventory compliance status
<b>AICS</b>	Contact supplier for inventory compliance status

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**15.2. Chemical safety assessment****SECTION 16: Other information****Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

H226 - Flammable liquid and vapor

H302 - Harmful if swallowed  
 H312 - Harmful in contact with skin  
 H315 - Causes skin irritation  
 H317 - May cause an allergic skin reaction  
 H318 - Causes serious eye damage  
 H319 - Causes serious eye irritation  
 H332 - Harmful if inhaled  
 H335 - May cause respiratory irritation  
 H400 - Very toxic to aquatic life  
 H410 - Very toxic to aquatic life with long lasting effects  
 H411 - Toxic to aquatic life with long lasting effects  
 H412 - Harmful to aquatic life with long lasting effects

**Legend**

SVHC: Substances of Very High Concern for Authorization:

**Legend Section 8: Exposure controls/personal protection**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

**Classification procedure**

H226 - Classification based on test data  
 H317 - Classification based on test data  
 H318 - Classification based on test data  
 H332 - Classification based on test data  
 H400 - Classification based on calculation method  
 H410 - Classification based on 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)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGl(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 Japan GHS Classification  
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
 Organization for Economic Co-operation and Development Screening Information Data Set  
 World Health Organization

Revision date

22-Feb-2023

**This material safety data sheet complies with the requirements of 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**