

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 21-Nov-2022

Revision Number 1

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

1.1. Product identifier

Product Name BIOMECTIN
Product Code(s) TP.3000.I.1___ISR
Chemical name Abamectin 18 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

Manufacturer

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

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

Acute toxicity - Oral	Category 4 - (H302)
Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Reproductive toxicity	Category 1B - (H360D)
Specific target organ toxicity (single exposure)	Category 3 - (H335)
Specific target organ toxicity (repeated exposure)	Category 2 - (H373)
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 1 - (H410)

2.2. Label elements

Contains 1-Methylpyrrolidin-2-one, 4-Nonylphenol, branched, ethoxylated, Abamectin



Signal word
Danger

Hazard statements

- H302 - Harmful if swallowed
- H315 - Causes skin irritation
- H319 - Causes serious eye irritation
- H332 - Harmful if inhaled
- H335 - May cause respiratory irritation
- H360D - May damage the unborn child
- H373 - May cause damage to organs through prolonged or repeated exposure
- 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
- P201 - Obtain special instructions before use
- P260 - Do not breathe dust/fume/gas/mist/vapors/spray
- P273 - Avoid release to the environment
- P280 - Wear protective gloves/protective clothing/eye protection/face protection
- P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
- 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
- P391 - Collect spillage
- P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
- P501 - Dispose of contents/ container to an approved waste disposal plant

Additional information

This product requires tactile warnings if supplied to the general public.
 This product requires child resistant fastenings if supplied to the general public.
 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
Abamectin	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]
Abamectin	-	71751-41-2	1-3	Acute Tox. 2 (H300)

				ATE = 8.7-12.8 mg/kg (oral) Acute Tox. 1 (H330) ATE = 0.034-0.051 mg/L/4h (inhl.) STOT RE 1 (H372) Repr. 2 (H361d) Aquatic Acute 1 (H400) M=10000 Aquatic Chronic 1 (H410) M=10000
Hexyl Alcohol	203-852-3	111-27-3	28-32	Acute Tox. 4 (H302)
1-Methylpyrrolidin-2-one	212-828-1	872-50-4	25-28	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Repr. 1B (H360D) STOT SE 3 (H335)
4-Nonylphenol, branched, ethoxylated	---	127087-87-0	10-13	Acute Tox. 4 (H302) Acute Tox. 4 (H332) Eye Dam. 1 (H318) Aquatic Chronic 2 (H411)

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
1-Methylpyrrolidin-2-one	872-50-4	X
4-Nonylphenol, branched, ethoxylated	127087-87-0	X

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
Inhalation	If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Get medical attention immediately if symptoms occur. IF exposed or concerned: Get medical advice/attention.
Eye contact	Get immediate medical advice/attention. 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.
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. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Do not breathe vapor or mist. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing.

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

Symptoms Coughing and/ or wheezing. Difficulty in breathing. Burning sensation.

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**

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Small Fire
Large Fire

Dry chemical, CO2, water spray or regular foam.
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. Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

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. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

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 breathe vapor or mist. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Remove contaminated clothing and shoes.

General hygiene considerations

Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

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. Store locked up.

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
1-Methylpyrrolidin-2-one 872-50-4	TWA: 10 ppm TWA: 40 mg/m ³ STEL: 20 ppm STEL: 80 mg/m ³ *	TWA: 10 ppm TWA: 40 mg/m ³ STEL 20 ppm STEL 80 mg/m ³ H* Skin sensitizer	TWA: 10 ppm TWA: 40 mg/m ³ STEL: 20 ppm STEL: 80 mg/m ³ *	TWA: 40 mg/m ³ STEL: 80 mg/m ³ H*	STEL: 20 ppm STEL: 80 mg/m ³ TWA: 10 ppm TWA: 40 mg/m ³ K*
Chemical name	Denmark	Germany	France	United Kingdom	Spain
Hexyl Alcohol 111-27-3	-	TWA: 25 ppm TWA: 105 mg/m ³	-	-	-
1-Methylpyrrolidin-2-one 872-50-4	TWA: 5 ppm TWA: 20 mg/m ³ H*	TWA: 20 ppm TWA: 82 mg/m ³ H*	TWA: 40 mg/m ³ TWA: 10 ppm STEL: 80 mg/m ³ STEL: 20 ppm *	TWA: 10 ppm TWA: 40 mg/m ³ STEL: 20 ppm STEL: 80 mg/m ³ Sk*	TWA: 10 ppm TWA: 40 mg/m ³ STEL: 20 ppm STEL: 80 mg/m ³ via dérmica*

Biological occupational exposure limits

Chemical name	European Union	Austria	Bulgaria	Croatia	Czech Republic
1-Methylpyrrolidin-2-one 872-50-4	-	-	-	20 mg/g Creatinine - urine (2-Hydroxy-N-methylsuccinimide) - about 16 hours after completion of the work shift	-

				70 mg/g Creatinine - urine (5-Hydroxy-N-methyl-2-pyrrolidone) - 2-4 times after the work shift/break	
Chemical name	Denmark	Finland	France	Germany	Germany MAK
1-Methylpyrrolidin-2-one 872-50-4	-	-	-	150 mg/L (urine - 5-Hydroxy-N-methyl-2-pyrrolidone end of shift) 150 mg/L - BAT (end of exposure or end of shift) urine	150 mg/L (urine - 5-Hydroxy-N-methyl-2-pyrrolidone end of shift)
Chemical name	Hungary	Ireland	Italy	Italy REL	
1-Methylpyrrolidin-2-one 872-50-4	-	20 mg/g Creatinine (urine - 2-Hydroxy-N-Methylsuccinimide morning after shift (8 hours)) 70 mg/g Creatinine (urine - 5-Hydroxy-N-methyl-2-pyrrolidone 2-4 hours after the end of the shift)	-	100 mg/L - urine (5-Hydroxy-N-methyl-2-pyrrolidone) - end of shift	
Chemical name	Slovenia	Spain	Switzerland	United Kingdom	
1-Methylpyrrolidin-2-one 872-50-4	150 mg/L - urine (5-Hydroxy-N-methyl-2-pyrrolidone) - at the end of the work shift	20 mg/g Creatinine (urine - 2-Hydroxy-N-methylsuccinimide pre-shift) 70 mg/g Creatinine (urine - 5-Hydroxy-N-methyl-2-pyrrolidone between 2-4 hours after the final exposure)	-	-	-

8.2. Exposure controls

Personal protective equipment

Eye/face protection Tight sealing safety goggles.

Hand protection Wear suitable gloves. Impervious gloves.

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

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General hygiene considerations Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

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

Physical state	Liquid
Color	Light to dark brown
Odor	Hydrocarbons like.

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	2.6 - 3.6	(1% solution)
pH (as aqueous solution)		
Melting point / freezing point		
Boiling point / boiling range		
Flash point	71.2 °C	
Evaporation rate	No data available.	
Flammability (solid, gas)	No data available.	
Flammability Limit in Air		
Upper flammability or explosive limits	No data available.	
Lower flammability or explosive limits	No data available.	
Vapor pressure	No data available.	
Vapor density	No data available.	
Relative density	1.0 - 1.1	
Water solubility	Forms an emulsion	
Solubility(ies)	No data available.	
Partition coefficient	No data available.	
Autoignition temperature	No data available.	
Decomposition temperature		
Kinematic viscosity	No data available.	
Dynamic viscosity	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 Excessive heat.

10.5. Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong oxidizing agents.

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 300-2000 mg/kg. Acute Tox. 4 (H302) Classification based on test data.
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 H315 - Causes skin irritation Classification based on calculation method

Serious eye damage/eye irritation H319 - Causes serious eye irritation. Classification based on test data.

Respiratory or skin sensitization Not a skin sensitizer. Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Chemical name	European Union
Abamectin	Not classified
1-Methylpyrrolidin-2-one	Not classified

Carcinogenicity

Chemical name	European Union
Abamectin	Not classified
1-Methylpyrrolidin-2-one	Not classified

Reproductive toxicity

Chemical name	European Union
Abamectin	Repr. 2 (H361d)
1-Methylpyrrolidin-2-one	Repr. 1B (H360D)

STOT - single exposure Cat 3 (H335) - May cause respiratory irritation. Classification based on calculation method.

STOT - repeated exposure Cat 2 (H373) - May cause damage to organs through prolonged or repeated exposure. Classification based on calculation method.

Aspiration hazard Not classified. (Based on calculation method 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.

High toxicity to honeybees.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Abamectin	No data available	Acute toxicity: LC50 = 0.0036 mg/l; Chronic toxicity: NOEC: 0.00052 mg/l	Acute toxicity: LC50 = 0.00002 mg/l; Chronic toxicity: NOEC: 0.0000035 mg/l	Acute toxicity: LC50 = 0.00012 mg/l; Chronic toxicity: NOEC: 0.00001 mg/l

12.2. Persistence and degradability

Persistence and degradability Not readily biodegradable. [Abamectin].

12.3. Bioaccumulative potential

Bioaccumulation Abamectin does not significantly bioaccumulate. log Kow of 4.4 at pH 7.2 at 20 °C.

Bioconcentration factor (BCF) 52 L/kg

Component Information

Chemical name	Partition coefficient
Abamectin	3.7
1-Methylpyrrolidin-2-one	-0.46

12.4. Mobility in soil

Mobility in soil Abamectin can be considered as immobile in soil.

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
Abamectin	The substance is not PBT / vPvB
Hexyl Alcohol	The substance is not PBT / vPvB
1-Methylpyrrolidin-2-one	The substance is not PBT / vPvB
4-Nonylphenol, branched, ethoxylated	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
Abamectin	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 3082
- 14.2 UN proper shipping name Environmentally hazardous substance, liquid, n.o.s. [Abamectin]
- 14.3 Transport hazard class(es) 9
- 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	3082
14.2 UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. [Abamectin]
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	None

ADR

14.1 UN number	3082
14.2 UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. [Abamectin]
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	None

IATA

14.1 UN number	3082
14.2 UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. [Abamectin]
14.3 Transport hazard class(es)	9
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
Hexyl Alcohol 111-27-3	RG 84	-
1-Methylpyrrolidin-2-one 872-50-4	RG 84	-

Germany

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

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)

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 authorization per REACH Annex XIV
1-Methylpyrrolidin-2-one - 872-50-4	72. 30. 71.	
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
4-Nonylphenol, branched, ethoxylated - 127087-87-0	I.1 I.2

Dangerous substance category per Seveso Directive (2012/18/EU)

H2 - ACUTE TOXIC

E1 - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

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

International Inventories

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

H300 - Fatal if swallowed

H302 - Harmful if swallowed

H315 - Causes skin irritation

H318 - Causes serious eye damage

H319 - Causes serious eye irritation

H330 - Fatal if inhaled

H332 - Harmful if inhaled

H335 - May cause respiratory irritation

H360D - May damage the unborn child

H361d - Suspected of damaging the unborn child

H372 - Causes damage to organs through prolonged or repeated exposure

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

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

H302 - Classification based on test data
H315 - Classification based on calculation method
H319 - Classification based on test data
H332 - Classification based on calculation method
H335 - Classification based on calculation method
H360D - Classification based on calculation method
H373 - Classification based on calculation method
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 21-Nov-2022

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