SAFETY DATA SHEET

PREVENTOL BM 5

Version	Revision Date:	SDS Number:	Date of last issue: 10/09/2020
2.0	05/06/2024	203000009814	Country / Language: US / EN

SECTION 1. IDENTIFICATION

Product name : PREVENTOL BM 5

Product code : 000000000062104598

EPA registration number : 39967-153

Manufacturer or supplier's details

Company : LANXESS Corporation
Product Safety & Regulatory Affairs
111 RIDC Park West Drive
Pittsburgh, Pennsylvania 15275-1112

Responsible Department : (800) LANXESS
(412) 809-1000
lanxesshes@lanxess.com

Emergency telephone : CHEMTREC (800) 424-9300 or
(703) 527-3887 (Outside U.S.A) and mention CCN12916.
Lanxess Emergency Phone (800) 410-3063.

Recommended use of the chemical and restrictions on use

Recommended use : Biocide for industrial application

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage : Category 1

Skin sensitization : Category 1

GHS label elements

Hazard pictograms :

Signal Word : Danger

Hazard Statements : May cause an allergic skin reaction.
Causes serious eye damage.

Precautionary Statements :

Prevention:

Avoid breathing mist or vapors.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/ eye protection/ face protection.

Response:

IF ON SKIN: Wash with plenty of soap and water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
If skin irritation or rash occurs: Get medical advice/ attention.
Wash contaminated clothing before reuse.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Aqueous solution

Components

Chemical name	CAS-No.	Concentration (% w/w)
2-methyl-2H-isothiazol-3-one	2682-20-4	>= 1 - < 5
1,2-benzisothiazol-3(2H)-one	2634-33-5	>= 1 - < 5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4. FIRST AID MEASURES

General advice : Treat symptomatically.

If inhaled : If inhaled, remove to fresh air.
Get medical attention if symptoms occur.

In case of skin contact : Wash off with soap and water.
Remove contaminated clothing and shoes.
Continue to rinse for at least 20 minutes.
Get medical attention if symptoms occur.
Wash contaminated clothing before reuse.

In case of eye contact : Get medical attention immediately.

In case of contact, flush eyes with plenty of water for at least 30 minutes. Use fingers to ensure that eyelids are separated and that the eye is being irrigated.
Remove contact lenses, if present and easy to do. Continue rinsing.
Chemical burns must be treated promptly by a physician.

If swallowed : Rinse mouth with water.
Do not induce vomiting unless directed to do by medical personnel.
Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed

Symptoms : Eye: Corrosive with symptoms of reddening, tearing, swelling, burning and possible permanent damage.
Skin: Causes irritation with symptoms of reddening, itching, and swelling.
Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Effects : May cause an allergic skin reaction.
Causes serious eye damage.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

Notes to physician : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : In case of fire, use water spray (fog), foam or dry chemical.

Unsuitable extinguishing media : None known.

Specific hazards during fire fighting : In a fire or if heated, a pressure increase will occur and the container may burst.
Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.
Water runoff from fire fighting may be corrosive.

Hazardous combustion products : Carbon dioxide (CO2)
Carbon monoxide
Nitrogen oxides (NOx)
Sulfur oxides

Further information : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : No action shall be taken involving any personal risk or without suitable training.
Put on appropriate personal protection equipment.
Do not touch or walk through spilled material.
Evacuate unnecessary personnel.
Keep unnecessary and unprotected personnel from entering.
Provide adequate ventilation.
Do not breathe vapors, aerosols.

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Stop leak if safe to do so.
Move containers from spill area.
Wash spillages into an effluent treatment plant or proceed as follows.
Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
Dispose of wastes in an approved waste disposal facility.
Do not allow into the sewerage system, surface waters or groundwater or into the soil.
Contaminated absorbent material may pose the same hazard as the spilled product.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Remove contaminated clothing and protective equipment before entering eating areas.
Workers should wash hands and face before eating, drinking and smoking.
Put on appropriate personal protection equipment.
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Persons with a history of skin sensitization to this product should not be employed in any process in which this product is used.
Avoid inhalation, ingestion and contact with skin and eyes.
Use only with adequate ventilation.

Conditions for safe storage : Store in accordance with local regulations.
Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink.
Do not store near acids.
Keep containers sealed until ready for use.
Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
Do not store in unlabeled containers.
Use appropriate container to avoid environmental contamination.
Empty containers retain residue and can be dangerous.
Do not reuse container.

Recommended storage temperature : 32 - 104 °F / 0 - 40 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal protective equipment

Respiratory protection : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
A NIOSH approved air purifying respirator with organic vapor cartridges and particulate prefilter can be used to minimize exposure.

Hand protection
Material : butyl-rubber

Remarks : Impervious gloves

Eye protection	:	Tightly fitting safety goggles
Skin and body protection	:	Wear suitable protective clothing. Chemical resistant apron Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Liquid
Physical state	:	liquid
Color	:	yellowish, to, orange
Odor	:	No data available
Odor Threshold	:	No data available
pH	:	8 - 9 Concentration: 10 %
Melting point/range	:	30 °F / -1 °C
Boiling point/boiling range	:	No data available
Flash point	:	No data available
Evaporation rate	:	No data available
Self-ignition	:	No data available
Burning number	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available

Vapor pressure	:	18.75 mmHg (68 °F / 20 °C) 84 mmHg (122 °F / 50 °C) 108.75 mmHg (131 °F / 55 °C)
Relative density	:	No data available
Density	:	1.015 - 1.04 g/cm3 (68 °F / 20 °C)
Solubility(ies)		
Water solubility	:	No data available
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	The product is chemically stable.
Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	:	No specific data.
Incompatible materials	:	No specific data.
Hazardous decomposition products	:	No hazardous decomposition products are known.
Hazardous decomposition products	:	No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

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

Product:

Acute oral toxicity : LD50 (Rat, female): > 2,500 mg/kg
Method: OECD Test Guideline 423

Acute inhalation toxicity : LC50 (Rat): 5.71 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rat, female): > 2,000 mg/kg
Method: OECD Test Guideline 402

Acute toxicity (other routes of administration) : Remarks: Test results on an analogous product

Components:

2-methyl-2H-isothiazol-3-one:

Acute oral toxicity : LD50 (Rat, female): 120 mg/kg
Method: OPPTS 870.1100
GLP: Yes

Acute inhalation toxicity : LC50 (Rat, male and female): 0.11 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
GLP: Yes

Acute dermal toxicity : LD50 (Rat, male and female): 242 mg/kg
Method: OECD Test Guideline 402
GLP: Yes

1,2-benzisothiazol-3(2H)-one:

Acute oral toxicity : LD50 (Rat, male and female): 670 mg/kg
Method: OECD Test Guideline 401

LD50 (Rat, male and female): 454 mg/kg
Method: OECD Test Guideline 401

LD50 (Rat, male and female): 490 mg/kg
Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: Dosage caused no mortality

LD50 (Rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: Dosage caused no mortality
Extrapolation according to Regulation (EC) No. 440/2008

Skin corrosion/irritation

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

Product:

Species : Rabbit
Result : Mild skin irritation

Components:

2-methyl-2H-isothiazol-3-one:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Corrosive after 3 minutes to 1 hour of exposure
GLP : Yes

1,2-benzisothiazol-3(2H)-one:

Species : Rabbit
Result : Skin irritation

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Species : Rabbit
Result : Risk of serious damage to eyes.

Components:

2-methyl-2H-isothiazol-3-one:

Remarks : Risk of serious damage to eyes.

1,2-benzisothiazol-3(2H)-one:

Species : Rabbit

Result	:	Risk of serious damage to eyes.
Method	:	EPA OPP 81-4

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

Not classified due to lack of data.

Product:

Routes of exposure	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Causes sensitization.
Remarks	:	Test results on an analogous product

Routes of exposure	:	Skin contact
Species	:	Mouse
Method	:	OECD Test Guideline 429
Result	:	Causes sensitization.
Remarks	:	Test results on an analogous product

Components:

2-methyl-2H-isothiazol-3-one:

Test Type	:	Buehler Test
Routes of exposure	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	The product is a skin sensitizer, sub-category 1A.
GLP	:	Yes

Test Type	:	Local lymph node assay (LLNA)
Routes of exposure	:	Skin contact
Species	:	Mouse
Method	:	OECD Test Guideline 429
Result	:	The product is a skin sensitizer, sub-category 1A.
GLP	:	Yes

Test Type	:	Maximization Test
Routes of exposure	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	The product is a skin sensitizer, sub-category 1A.
GLP	:	Yes

1,2-benzisothiazol-3(2H)-one:

Routes of exposure	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	May cause sensitization by skin contact.

Germ cell mutagenicity

Not classified due to lack of data.

Components:

2-methyl-2H-isothiazol-3-one:

Genotoxicity in vitro	:	Test Type: Ames test Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative GLP: Yes Test Type: Chromosome aberration test in vitro Test system: Human lymphocytes Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: negative GLP: Yes Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative GLP: Yes
Genotoxicity in vivo	:	Test Type: unscheduled DNA synthesis assay Species: Rat (male) Cell type: Liver cells Application Route: Oral Method: OECD Test Guideline 486 Result: negative GLP: Yes Test Type: Micronucleus test Species: Mouse (male and female) Cell type: Bone marrow Application Route: Oral Method: OECD Test Guideline 474 Result: negative GLP: Yes

1,2-benzisothiazol-3(2H)-one:

Genotoxicity in vitro : Test system: Bacteria
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Test system: Human lymphocytes
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: positive

Test system: mouse lymphoma cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

Genotoxicity in vivo : Species: Rat (male)
Application Route: Oral
Method: OECD Test Guideline 486
Result: negative

Species: Mouse (male and female)
Application Route: Oral
Method: OECD Test Guideline 474
Result: negative

Carcinogenicity

Not classified due to lack of data.

Components:

2-methyl-2H-isothiazol-3-one:

Species	:	Mouse, male
Application Route	:	Dermal
Exposure time	:	30 month(s)
Dose	:	400 parts per million
Frequency of Treatment	:	3 days/week
Method	:	No information available.
Result	:	negative
GLP	:	No
Remarks	:	Test results on an analogous product

Species	:	Rat, male and female
Application Route	:	Oral
Exposure time	:	24 month(s)
Dose	:	30 - 100 - 300 parts per million
Method	:	OECD Test Guideline 453
Result	:	negative
GLP	:	Yes

Remarks : Test results on an analogous product

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified due to lack of data.

Components:

2-methyl-2H-isothiazol-3-one:

Effects on fertility : Test Type: Two-generation study
Species: Rat, male and female
Application Route: Oral
Dose: 0 - 50 - 200 - 1000 parts per million
General Toxicity Parent: NOAEL: 200 ppm
Fertility: NOAEL: 1,000 ppm
Early Embryonic Development: NOAEL: 200 ppm
Method: OECD Test Guideline 416
Result: Animal testing did not show any effects on fertility.
GLP: Yes

Effects on fetal development : Test Type: Embryo-fetal development
Species: Rat, female
Application Route: Oral
Dose: 0 - 5 - 20 - 60/40 milligram per kilogram
General Toxicity Maternal: NOAEL: 20 mg/kg bw/day
Teratogenicity: NOAEL: 40 mg/kg bw/day
Developmental Toxicity: NOAEL: 40 mg/kg bw/day
Embryo-fetal toxicity.: NOAEL: 40 mg/kg body weight
Method: OECD Test Guideline 414
Result: negative
GLP: Yes

Test Type: Embryo-fetal development
Species: Rabbit, female
Application Route: Oral
Dose: 0 - 3 - 10 - 30 milligram per kilogram
General Toxicity Maternal: NOAEL: 10 mg/kg bw/day
Teratogenicity: NOAEL: 30 mg/kg bw/day
Developmental Toxicity: NOAEL: 30 mg/kg bw/day
Embryo-fetal toxicity.: NOAEL: 30 mg/kg body weight
Method: OECD Test Guideline 414

Result: negative
GLP: Yes

1,2-benzisothiazol-3(2H)-one:

Effects on fertility	:	Species: Rat, female Application Route: Oral General Toxicity Parent: NOAEL: 112 mg/kg body weight General Toxicity F1: NOAEL: 56.6 mg/kg body weight General Toxicity F2: NOAEL: 56.6 mg/kg body weight Method: OPPTS 870.3800 Result: negative
Effects on fetal development	:	Species: Rat, female Application Route: Oral Developmental Toxicity: NOAEL: 112 mg/kg body weight Method: OPPTS 870.3800 Result: negative

STOT-single exposure

Not classified due to lack of data.

STOT-repeated exposure

Not classified due to lack of data.

Repeated dose toxicity

Components:

2-methyl-2H-isothiazol-3-one:

Species	:	Rat, male and female
NOAEL	:	225 ppm
LOAEL	:	1000 ppm
Application Route	:	Oral
Exposure time	:	90 d
Number of exposures	:	Continuous
Dose	:	0 - 75 - 225 - 1000 parts per million
Method	:	OECD Test Guideline 408
GLP	:	Yes
Remarks	:	Subchronic toxicity

Species	:	Rat, male and female
NOAEL	:	28.59 mg/kg
LOAEL	:	71.21 mg/kg
Application Route	:	Oral
Exposure time	:	28 d
Number of exposures	:	daily
Dose	:	10,03 - 28,59 - 71,21 mg/kg bw/day
Method	:	OECD Test Guideline 407
GLP	:	Yes

Remarks	:	Subacute toxicity

Species	:	Dog, male and female
NOAEL	:	1500 ppm
Application Route	:	Oral
Exposure time	:	90 d
Number of exposures	:	daily
Dose	:	0 - 100 - 400 - 1500 parts per million
Method	:	OECD Test Guideline 409
GLP	:	Yes
Remarks	:	Subchronic toxicity

1,2-benzisothiazol-3(2H)-one:

Species	:	Rat, male and female
NOAEL	:	150 mg/kg
Application Route	:	Oral
Exposure time	:	28 d
Method	:	OECD Test Guideline 407
Remarks	:	Subacute toxicity

Species	:	Rat, male and female
NOAEL	:	69 mg/kg
Application Route	:	Oral
Exposure time	:	90 d
Method	:	Regulation (EC) No. 440/2008, Annex, B.26
Remarks	:	Subchronic toxicity

Aspiration toxicity

Not classified due to lack of data.

Components:

2-methyl-2H-isothiazol-3-one:

Based on physical properties, not likely to be an aspiration hazard.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

2-methyl-2H-isothiazol-3-one:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 4.77 mg/l Exposure time: 96 h Test Type: flow-through test Analytical monitoring: Yes Method: OECD Test Guideline 203

GLP: Yes
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.934 mg/l
End point: Immobilization
Exposure time: 48 h
Test Type: flow-through test
Analytical monitoring: Yes
Method: OECD Test Guideline 202
GLP: Yes
Remarks: Fresh water

LC50 (Mysidopsis bahia (opossum shrimp)): 1.81 mg/l
Exposure time: 96 h
Test Type: flow-through test
Analytical monitoring: Yes
Method: US-EPA OPPTS 850.1035
GLP: Yes
Remarks: salt water

Toxicity to algae/aquatic plants : ErC50 (Raphidocelis subcapitata (freshwater green alga)): 0.158 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: Yes
Method: OECD Test Guideline 201
GLP: Yes
Remarks: Fresh water

NOEC (Raphidocelis subcapitata (freshwater green alga)): 0.05 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: Yes
Method: OECD Test Guideline 201
GLP: Yes
Remarks: Fresh water

ErC50 (Skeletonema costatum (marine diatom)): > 0.0725 mg/l
End point: Growth rate
Exposure time: 96 h
Test Type: static test
Analytical monitoring: Yes
Method: OECD Test Guideline 201
GLP: Yes
Remarks: salt water

NOEC (Skeletonema costatum (marine diatom)): 0.0725 mg/l
End point: Growth rate
Exposure time: 96 h
Test Type: static test
Analytical monitoring: Yes
Method: OECD Test Guideline 201
GLP: Yes
Remarks: salt water

Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): 4.93 mg/l
End point: mortality
Exposure time: 98 d
Test Type: flow-through test
Analytical monitoring: Yes
Method: OECD Test Guideline 210
GLP: Yes
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.044 mg/l
Exposure time: 21 d
Test Type: flow-through test
Analytical monitoring: Yes
Method: OECD Test Guideline 211
GLP: Yes
Remarks: Fresh water

Toxicity to microorganisms : EC50 (activated sludge): 41 mg/l
End point: Respiration inhibition
Exposure time: 3 h
Test Type: static test
Analytical monitoring: No
Method: OECD Test Guideline 209
GLP: Yes
Remarks: Fresh water
nominal concentration

1,2-benzisothiazol-3(2H)-one:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2.15 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2.9 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): 0.11 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)):
0.0403 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50 (adapted and activated sludge micro-organism): 12.8 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209

Persistence and degradability

Components:

2-methyl-2H-isothiazol-3-one:

Biodegradability : Biodegradation: 98 %
Exposure time: 48 d
Method: Simulation study
Remarks: Considered rapidly degradable in the environment.

Result: Not readily biodegradable.
Biodegradation: 50 %
Exposure time: 29 d
Method: OECD Test Guideline 301B
GLP: Yes

Result: Not readily biodegradable.
Biodegradation: 20 %
Exposure time: 28 d
Method: OECD Test Guideline 301D
GLP: Yes

1,2-benzisothiazol-3(2H)-one:

Biodegradability : Result: rapidly biodegradable
Remarks: Considered rapidly degradable in the environment.

Stability in water : Degradation half life: 2 - 3 d (12 °C)
Remarks: Estuary

Degradation half life: 5 - 12 d (12 °C)
Remarks: Sea water

Bioaccumulative potential

Components:

2-methyl-2H-isothiazol-3-one:

Partition coefficient: n-octanol/water	:	log Pow: -0.486 (77 °F / 25 °C) pH: 7 Method: OECD Test Guideline 107 GLP: Yes

1,2-benzisothiazol-3(2H)-one:

Bioaccumulation	:	Species: Fish Bioconcentration factor (BCF): 6.62 Method: OECD Test Guideline 305
Partition coefficient: n-octanol/water	:	log Pow: 0.7 (68 °F / 20 °C) Method: Regulation (EC) No. 440/2008, Annex, A.8

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

RCRA - Resource Conservation and Recovery Authorization Act	:	If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)
Waste from residues	:	The generation of waste should be avoided or minimized wherever possible. This material and its container must be disposed of in a safe way. Empty containers retain product residue; observe all precautions for product. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Waste disposal should be in accordance with existing federal, state, provincial and/or local environmental controls.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

UN/ID No.	:	UN 3082

Proper shipping name	:	Environmentally hazardous substance, liquid, n.o.s. (2-METHYL-4-ISOTHIAZOLIN-3-ONE)
Class	:	9
Packing group	:	III
Labels	:	9
	:	
Packing instruction (cargo aircraft)	:	964 : 450.00 L
Packing instruction (passenger aircraft)	:	964 : 450.00 L
Environmentally hazardous	:	yes
		

IMDG-Code

UN number	:	UN 3082
UN proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-METHYL-4-ISOTHIAZOLIN-3-ONE)
Class	:	9
Packing group	:	III
Labels	:	9
	:	
EmS Code	:	F-A, S-F
Marine pollutant	:	yes
		

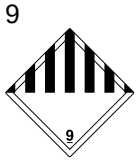
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

49 CFR

UN/ID/NA number	:	UN 3082
Proper shipping name	:	Environmentally hazardous substance, liquid, n.o.s. (2-METHYL-4-ISOTHIAZOLIN-3-ONE)

Class	:	9
Packing group	:	III
Labels	:	9
	:	
ERG Code	:	171
Marine pollutant	:	yes
		

Hazard and Handling Notes.
Environmentally hazardous substance.
Risk of serious damage to eyes
Keep separated from foodstuffs
The U.S. DOT regulations in 49 CFR 172.102 permit this material to ship as an Environmentally Hazardous Substance, Class 9, using Special Provision 146.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards	:	Respiratory or skin sensitization Serious eye damage or eye irritation
SARA 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

water	7732-18-5	> 1
sodium hydroxide	1310-73-2	< 0.1

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

TSCA inventory

TSCA : This product is regulated under the United States Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).

TSCA list

No substances are subject to a Significant New Use Rule.

The following substance(s) is/are subject to TSCA 12(b) export notification requirements:
2-methyl-2H-isothiazol-3-one 2682-20-4

FIFRA information

EPA registration number : 39967-153

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

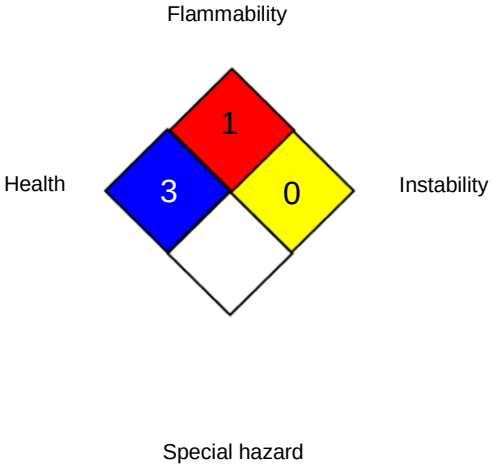
Signal Word : DANGER

Hazard Statements : Corrosive Causes irreversible eye damage. Harmful if swallowed or absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Do not get in eyes, on skin, or on clothing.

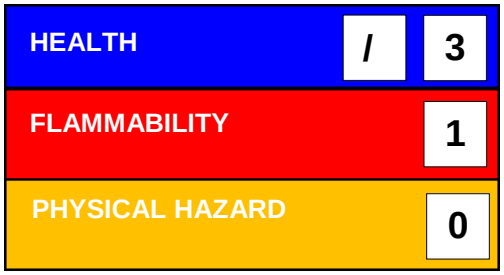
SECTION 16. OTHER INFORMATION

Further information

NFPA 704:



HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification 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; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments

and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 05/06/2024

The data contained in this Safety Data Sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. 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 to be a guidance for processing and does not contain any 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. It is the responsibility of the recipient of the product to ensure that any proprietary rights and existing laws and legislation are observed.

Relevant changes from the previous version are marked on the left side of the Safety Data Sheet with a black double bar in appropriate places.