SAFETY DATA SHEET
according to the OSHA Hazard Communication Standard

NEOLONE™ M-10 Industrial Microbiocide

Version	Revision Date:	SDS Number:	Date of last issue: 08/28/2024
2.0	07/23/2025	203000021567	Country / Language: US / EN

SECTION 1. IDENTIFICATION

Product name : NEOLONE™ M-10 Industrial Microbiocide

Product code : 000000000062634485

EPA registration number : 707-298

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)

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

Skin corrosion : Sub-category 1B

Serious eye damage : Category 1

Skin sensitization : Category 1

Other hazards

None known.

GHS label elements

Hazard pictograms	:	
Signal Word	:	Danger
Hazard Statements	:	H302 + H332 Harmful if swallowed or if inhaled. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction.
Supplemental Hazard Statements	:	Corrosive to the respiratory tract.
Precautionary Statements	:	**Prevention:** P261 Avoid breathing mist or vapors. P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing must not be allowed out of the workplace. P280 Wear protective gloves, protective clothing, eye protection and face protection. **Response:** P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth. P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. P305 + P351 + P338 + P310 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. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention. P362 + P364 Take off contaminated clothing and wash it before reuse. **Storage:** P405 Store locked up. **Disposal:** P501 Dispose of contents/ container to an approved waste disposal plant.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS No./Unique ID	Concentration (% w/w)
2-methyl-2H-isothiazol-3-one	2682-20-4*	>= 7 - <= 13
3(2H)-Isothiazolone, 4,5-dichloro-2-methyl-	26542-23-4*	<= 0.1

* Indicates that the identifier is a CAS No.
Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4. FIRST AID MEASURES

General advice : Do not leave the victim unattended.
Move out of dangerous area.
Keep warm and in a quiet place.
Show this safety data sheet to the doctor in attendance.

If inhaled : Get medical attention immediately.
Remove victim to fresh air and keep at rest in a position comfortable for breathing.
If unconscious, place in recovery position and get medical attention immediately.
Maintain open airway.
If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

In case of skin contact : Get medical attention immediately.
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Continue to rinse for 30 minutes.
Chemical burns must be treated promptly by a physician.
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.
If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.
If unconscious, place in recovery position and get medical attention immediately.
Never give anything by mouth to an unconscious person.

Maintain open airway.

Most important symptoms and effects, both acute and delayed

Symptoms	:	Acute overexposure to this product may cause dizziness, headache, drowsiness, malaise, abdominal pain. Eye: Corrosive with symptoms of reddening, tearing, swelling, burning and possible permanent damage. Skin: Reddening, 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	:	Harmful if swallowed or if inhaled. May cause an allergic skin reaction. Causes serious eye damage. Causes severe burns. Corrosive to the respiratory tract.
Protection of first-aiders	:	No action shall be taken involving any personal risk or without suitable training.
Notes to physician	:	MATERIAL IS CORROSIVE. It may not be advisable to induce vomiting. Possible mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock and convulsions maybe necessary. Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during fire fighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	Carbon dioxide (CO2) Carbon monoxide Nitrogen oxides (NOx) Sulfur oxides
Further information	:	Cool containers/tanks with water spray. Minimize exposure. Do not breathe fumes. Contain run-off.

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	:	Wear a NIOSH approved (or equivalent) respirator (with organic vapor/acid gas cartridge and a dust/mist filter) during spill clean-ups and deactivation of this material. MATERIAL IS CORROSIVE. Protective clothing, including chemical splash goggles, nitrile or butyl rubber full length gloves, rubber apron, or clothing made of nitrile or butyl rubber, and rubber overshoes must be worn during spill clean-ups and deactivation of this material. If material comes in contact with the skin during clean-up operations, IMMEDIATELY remove all contaminated clothing and wash exposed skin areas with soap and water. See SECTION 4, First Aid Measures, for further information.
Environmental precautions	:	Do not allow material to contaminate ground water system. Prevent product from entering drains.
Methods and materials for containment and cleaning up	:	WARNING: KEEP SPILLS AND CLEAN-UP RESIDUALS OUTOF MUNICIPAL SEWERS AND OPEN BODIES OF WATER. Adsorb the spill with spill pillows or inert solids such as clay or vermiculite, and transfer contaminated materials to suitable containers for disposal. Deactivate spill area with freshly prepared solution of 5% sodium bicarbonate and 5% sodium hypochlorite in water. Apply solution to the spill area at a ratio of 10 volumes deactivation solution per estimated volume of residual spill to deac tivate any residual active ingredient. Let stand for 30 minutes. Flush the spill area with copious amounts of water to chemical sewer (if in accordance with local procedures, permits and regulations). DO NOT add deactivation solution to the waste pail to deactivate the adsorbed material. See Section 13, "Disposal Considerations", for information regarding the disposal of contained materials.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	:	Corrosive Do not handle material near food, feed or drinking water.
Conditions for safe storage	:	Keep in a well-ventilated place. The product as supplied may evolve gas (largely carbon dioxide) slowly. To prevent the buildup of pressure the product is packaged in specially vented containers, where necessary. Keep this product in the original container when not in use. Container must be stored and transported in an upright position to prevent spilling the contents through the vent, where

fitted.
Do not store this material in containers made of the following: steel
Do not store near food, feed or fertilizers.

Further information on storage conditions	:	CONTAINERS MAY BE HAZARDOUS WHEN EMPTY. Since emptied containers retain product residue follow all (M)SDS and label warnings even after container is emptied. Expiration date based only on retention of >95% actives during storage at 20ºC-25ºC (68ºF-77ºF).
Recommended storage temperature	:	34 - 131 °F / 1 - 55 °C
Further information on storage stability	:	Stable under recommended storage conditions.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures	:	Use local exhaust ventilation with a minimum capture velocity of 150 ft/min. (0.75 m/sec.) at the point of dust or mist evolution. Refer to the current edition of "Industrial Ventilation: A Manual of Recommended Practice" published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

Personal protective equipment

Respiratory protection	:	Typical use of this material does not result in workplace exposures that exceed the exposure limits listed in the Exposure Limit Information Section. For those special workplace conditions where the listed exposure limits are exceeded, a respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed. For concentrations up to 10 times the exposure limit, wear a properly fitted NIOSH approved (or equivalent) half-mask or full facepiece air purifying respirator equipped with organic vapor cartridges and N95 filters. If oil mist is present, use R95 or P95 filters. For those unlikely situations where exposure may greatly exceed the listed exposure limits (i.e. greater than 10-fold), or in any emergency situation, wear a properly fitted NIOSH approved (or equivalent) self-contained breathing apparatus in the pressure demand mode or a full facepiece airline respirator in the pressure demand mode with emergency escape provision. See SECTION 6, Accidental Release Measures, for respirator and protective clothing requirements for spill clean-up and decontamination of this material.

Hand protection

Remarks	:	Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl rubber - IIR Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Neoprene Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride - PVC Glove thickness alone is not a good indicator of the level of protection a glove provides against a chemical substance as this level of protection is also highly dependent on the specific composition of the material that the glove is fabricated from. The thickness of the glove must, depending on model and type of material, generally be more than 0.35 mm to offer sufficient protection for prolonged and frequent contact with the substance. As an exception to this general rule it is known that multilayer laminate gloves may offer prolonged protection at thicknesses less than 0.35 mm. Other glove materials with a thickness of less than 0.35 mm may offer sufficient protection when only brief contact is expected. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.
Eye protection	:	Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent). Eye protection worn must be compatible with respiratory protection system employed.
Skin and body protection	:	Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Protective measures	:	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
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	:	Aqueous solution

Physical state	:	liquid
Color	:	clear
Odor	:	Mild odor
Odor Threshold	:	No data available
pH	:	3.0 - 6.0 Concentration: 100 %
Solidification point	:	-4 - 5 °F / -20 - -15 °C
Boiling point/boiling range	:	212 °F / 100 °C
Flash point	:	No data available
Evaporation rate	:	No data available
Flammability (liquids)	:	No data available
Self-ignition	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Relative density	:	1.00 - 1.04
Density	:	1.02 g/cm3 (68 °F / 20 °C)
Solubility(ies)		
Water solubility	:	completely miscible
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	log Pow: -0.486 (75 °F / 24 °C) Method: No information available.
Ignition temperature	:	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
Surface tension	:	No data available
Molecular weight	:	149.50 g/mol
Particle size	:	Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Polymerization will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	:	No data available
Incompatible materials	:	Avoid contact with the following: Oxidizing agents Amines Reducing agents mercaptan
Hazardous decomposition products	:	Nitrogen oxides (NOx) Sulfur oxides hydrogen chloride

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Harmful if swallowed or if inhaled.

Product:

Acute oral toxicity	:	LD50 (Rat, female): 1,091 mg/kg LD50 (Rat, male): 2,834 mg/kg

Acute inhalation toxicity : Acute toxicity estimate: 1.13 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

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

3(2H)-Isothiazolone, 4,5-dichloro-2-methyl-:

Acute oral toxicity : LD50 (Rat): 100 mg/kg
Method: Estimated value
Remarks: Based on data from similar materials

Acute inhalation toxicity : LC50 (Rat): > 0.5 mg/l
Exposure time: 4 hrs
Test atmosphere: dust/mist
Method: Estimated value
Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rat): 300 mg/kg
Method: Estimated value
Remarks: Based on data from similar materials

Skin corrosion/irritation

Causes severe burns.

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

3(2H)-Isothiazolone, 4,5-dichloro-2-methyl-:

Result	:	Corrosive
Remarks	:	Brief contact may cause severe skin burns. Symptoms may include pain, severe local redness and tissue damage.

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Result	:	Risk of serious damage to eyes.
Remarks	:	May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur.

Components:

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

Remarks	:	Risk of serious damage to eyes.

3(2H)-Isothiazolone, 4,5-dichloro-2-methyl-:

Result	:	Corrosive
Remarks	:	May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur.

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
Result	:	Causes sensitization.
Remarks	:	For respiratory sensitization: No relevant data found.

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

3(2H)-Isothiazolone, 4,5-dichloro-2-methyl-:

Assessment	:	May cause sensitization by skin contact.
Remarks	:	Has caused allergic skin reactions when tested in guinea pigs.

Remarks	:	For respiratory sensitization: No relevant information found.

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

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 substance/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 substance/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

STOT-single exposure

Corrosive to the respiratory tract.

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

3(2H)-Isothiazolone, 4,5-dichloro-2-methyl-:

Remarks	:	Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

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.

3(2H)-Isothiazolone, 4,5-dichloro-2-methyl-:

Aspiration into the lungs may occur during ingestion or vomiting, causing tissue damage or lung injury.

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

3(2H)-Isothiazolone, 4,5-dichloro-2-methyl-:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1.6 mg/l
Exposure time: 96 hrs
Test Type: semi-static test
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 4.71 mg/l
Exposure time: 48 hrs
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : ErC50 (algae): 0.31 mg/l
End point: Growth inhibition
Exposure time: 120 hrs
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : 10

Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): 0.05 mg/l
Exposure time: 14 d

Toxicity to daphnia and other aquatic invertebrates (Chron- : NOEC (Daphnia magna (Water flea)): 0.172000 mg/l
End point: number of offspring

ic toxicity) Exposure time: 21 d

M-Factor (Chronic aquatic toxicity) : 10

Toxicity to microorganisms : EC50 (Bacteria): 5.7 mg/l
Exposure time: 16 hrs

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Persistence and degradability

Components:

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

Biodegradability : 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

3(2H)-Isothiazolone, 4,5-dichloro-2-methyl-:

Biodegradability : aerobic
Concentration: 6 mg/l
Result: Readily biodegradable.
Biodegradation: 98 %
Exposure time: 2 d
Method: OECD Test Guideline 302B
Remarks: 10-day Window: Not applicable

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

3(2H)-Isothiazolone, 4,5-dichloro-2-methyl-:

Partition coefficient: n-octanol/water : Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Mobility in soil

Components:

3(2H)-Isothiazolone, 4,5-dichloro-2-methyl-:

Distribution among environmental compartments : Remarks: No relevant data found.

Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life.
Toxic to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

RCRA - Resource Conservation and Recovery Authorization Act : When discarded in its purchased form, this product meets the criteria of corrosivity, and should be managed as a hazardous waste (EPA Hazardous Waste Number D002). (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 3265
Proper shipping name : Corrosive liquid, acidic, organic, n.o.s.
(2-METHYL-2H-ISOTHIAZOL-3-ONE)
Class : 8
Packing group : II
Labels : 8
:

Packing instruction (cargo aircraft)	:	855: 30.00 L
Packing instruction (passenger aircraft)	:	851: 1.00 L
Environmentally hazardous	:	yes

IMDG-Code

UN number	:	UN 3265
UN proper shipping name	:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (2-METHYL-2H-ISOTHIAZOL-3-ONE)
Class	:	8
Packing group	:	II
Labels	:	8
	:	

EmS Code	:	F-A, S-B
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 3265
Proper shipping name	:	Corrosive liquid, acidic, organic, n.o.s. (2-METHYL-2H-ISOTHIAZOL-3-ONE)
Class	:	8
Packing group	:	II
Labels	:	8
	:	

ERG Code	:	153
Marine pollutant	:	no

Hazard and Handling Notes

Corrosive.
Environmentally hazardous substance.
Keep separated from foodstuffs

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 : Acute toxicity (any route of exposure)
Respiratory or skin sensitization
Skin corrosion or irritation
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
2-methyl-2H-isothiazol-3-one	2682-20-4
ammonium chloride	12125-02-9

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).

FIFRA information

EPA registration number : 707-298

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:

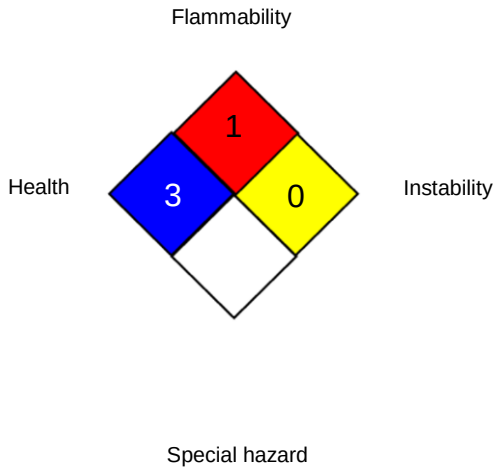
Signal Word : DANGER

Hazard Statements : Corrosive eye damage Causes skin burns. May cause allergic skin reaction. May be harmful if inhaled. May be fatal if swallowed or absorbed through the skin.

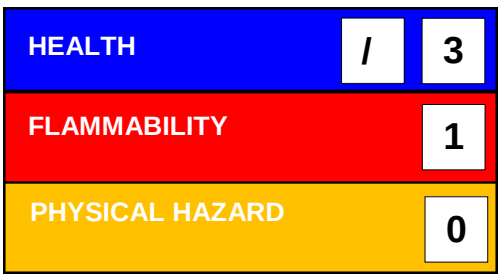
SECTION 16. OTHER INFORMATION

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 Standardization; 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 - In-

ternational Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organization 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, Authorization 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 : 07/23/2025

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.

US / EN