

# SAFETY DATA SHEET

## PREVENTOL P 91 MV



Version 1.0      Revision Date: 11/09/2020      SDS Number: 203000008174      Date of last issue: -  
Country / Language: US / EN

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### SECTION 1. IDENTIFICATION

Product name : PREVENTOL P 91 MV  
Product code : 00000000057875360  
EPA registration number : 39967-79

#### 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

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

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### 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 irritation : Category 2  
Serious eye damage : Category 1  
Skin sensitization : Category 1  
Specific target organ toxicity : Category 3 (Respiratory system)  
- single exposure

#### GHS label elements

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Hazard pictograms



Signal Word

: Danger

Hazard Statements

: Harmful if swallowed or if inhaled.  
Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye damage.  
May cause respiratory irritation.

Precautionary Statements

**Prevention:**

Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.  
Wash skin thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Use only outdoors or in a well-ventilated area.  
Contaminated work clothing must not be allowed out of the workplace.  
Wear protective gloves/ eye protection/ face protection.

**Response:**

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.  
IF ON SKIN: Wash with plenty of soap and water.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.  
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.  
Take off contaminated clothing and wash before reuse.

**Storage:**

Store in a well-ventilated place. Keep container tightly closed.  
Store locked up.

**Disposal:**

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

**Other hazards**

None known.

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### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Components

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Chemical name	CAS-No.	Concentration (% w/w)
bronopol (Solution)	52-51-7	>= 5 - < 10
sodium nitrate	7631-99-4	>= 1 - < 5
5-chloro-2-methyl-2H-isothiazol-3-one	26172-55-4	>= 0.1 - < 1
2-methyl-2H-isothiazol-3-one	2682-20-4	>= 0.1 - < 1

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

### SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.  
Consult a physician.  
Show this safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.
- 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 : Wash off with soap and plenty of water.  
Remove contaminated clothing and shoes.  
Continue to rinse for at least 20 minutes.  
Wash contaminated clothing before re-use.  
Get medical attention if symptoms occur.
- 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.

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Get medical attention immediately.

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

- Symptoms** : Eye: Corrosive with symptoms of reddening, tearing, swelling, burning and possible permanent damage.  
May cause irritation with symptoms of reddening and itching.  
Acute overexposure to this product may cause dizziness, headache, drowsiness, malaise, abdominal pain.  
Once sensitized, an allergic skin reaction may occur with reddening, swelling, and rash when subsequently exposed to very low levels.  
May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose.
- Effects** : Harmful if swallowed or if inhaled.  
Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye damage.  
May cause respiratory irritation.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

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### 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** : Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.  
In a fire or if heated, a pressure increase will occur and the container may burst.  
Water runoff from fire fighting may be corrosive.
- Hazardous combustion products** : Carbon dioxide (CO<sub>2</sub>)  
Carbon monoxide  
Nitrogen oxides (NO<sub>x</sub>)  
Halogenated compounds  
Metal oxides  
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

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face-piece operated in positive pressure mode.

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### 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 personnel to safe areas.  
Keep unnecessary and unprotected personnel from entering.  
In case of inadequate ventilation wear respiratory protection.
- Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.  
Inform the responsible authorities in case of gas leakage, or of entry into waterways, soil or drains.
- Methods and materials for containment and cleaning up : Stop leak if safe to do so.  
Move containers from spill area.  
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.  
Contaminated absorbent material may pose the same hazard as the spilled product.

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### SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Do not breathe vapors/dust.  
Avoid contact with skin and eyes.  
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.  
Use only with adequate ventilation.  
Persons with a history of skin sensitization to this product should not be employed in any process in which this product is used.
- 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.  
Keep container tightly closed.  
Do not store in unlabeled containers.  
Empty containers retain residue and can be dangerous.

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Do not reuse container.

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

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### 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.

#### Personal protective equipment

**Respiratory protection** : NIOSH approved, air-purifying organic vapor respirator. 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. For emergency and other conditions where the exposure limits may be greatly exceeded, use an approved, positive pressure self-contained breathing apparatus or supplied air.

**Hand protection**  
**Material** : butyl-rubber

**Eye protection** : Tightly fitting safety goggles  
Faceshield may be necessary in operations with splash potential but cannot be used in place of chemical safety goggles.

**Skin and body protection** : Wear suitable protective clothing.

**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.

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### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state** : liquid

**Color** : light yellow

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Odor : slight

Odor Threshold : No data available

pH : 3 - 5.5

Melting point/range : 28 °F / -2 °C

Boiling point/boiling range : 210 °F / 99 °C  
(1,013 hPa)

Flash point : > 212 °F / > 100 °C  
Method: closed cup

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 : 17.25 mmHg (68 °F / 20 °C)  
80.25 mmHg (122 °F / 50 °C)  
102.75 mmHg (131 °F / 55 °C)

Relative density : No data available

Density : 1.067 - 1.071 g/cm<sup>3</sup> (68 °F / 20 °C)

Solubility(ies)  
Water solubility : soluble  
Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Autoignition temperature : > 1112 °F / > 600 °C

Decomposition temperature : No data available

Viscosity

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Viscosity, dynamic                   : 1.5 mPa.s  
Viscosity, kinematic                : No data available  
Explosive properties                 : No data available  
Oxidizing properties                 : No data available

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### 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.

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### SECTION 11. TOXICOLOGICAL INFORMATION

The most important known symptoms and effects are described in Section 2 and/or Section 4.

#### Information on likely routes of exposure

Inhalation  
Eye contact  
Skin contact  
Ingestion

#### Acute toxicity

Harmful if swallowed or if inhaled.

#### Product:

Acute oral toxicity                   : LD50 (Rat): 1,030 mg/kg  
Acute inhalation toxicity           : LC50 (Rat): > 1 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Acute dermal toxicity                : LD50 (Rat): > 5,000 mg/kg

#### Components:

##### **bronopol (Solution):**

Acute oral toxicity                   : LD50 (Rat): 193 - 211 mg/kg



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Acute inhalation toxicity : LC50 (Rat, male and female): > 0.588 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist

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

### **sodium nitrate:**

Acute oral toxicity : LD50 (Rat): 3,430 mg/kg  
Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rat, male and female): > 5,000 mg/kg  
Method: OECD Test Guideline 402  
GLP: yes

### **5-chloro-2-methyl-2H-isothiazol-3-one:**

Acute oral toxicity : LD50 (Rat): 481 mg/kg

Acute inhalation toxicity : LC50 (Rat): 1.23 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rat): > 1,008 mg/kg

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

Acute oral toxicity : LD50 (Rat, female): 183 mg/kg

Acute inhalation toxicity : LC50 (Rat): 0.53 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit, male): 218 mg/kg

### **Skin corrosion/irritation**

Causes skin irritation.

### **Product:**

Result : Severe skin irritation  
Remarks : Test results on an analogous product

### **Components:**

#### **bronopol (Solution):**

Species : Rabbit  
Remarks : No skin irritation

### **sodium nitrate:**

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Species : Rabbit  
Method : OECD Test Guideline 404  
Result : No skin irritation  
GLP : no  
Remarks : Mild skin irritation

### **5-chloro-2-methyl-2H-isothiazol-3-one:**

Species : Rabbit  
Method : OECD Test Guideline 404  
Result : Causes burns.

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

Result : Corrosive, category 1C - where responses occur after exposures between 1 hour and 4 hours and observations up to 14 days.

### **Serious eye damage/eye irritation**

Causes serious eye damage.

### **Product:**

Remarks : Test results on an analogous product

### **Components:**

#### **bronopol (Solution):**

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

#### **sodium nitrate:**

Species : Rabbit  
Result : Irritating to eyes.  
Method : OECD Test Guideline 405  
GLP : yes

### **5-chloro-2-methyl-2H-isothiazol-3-one:**

Species : Rabbit  
Result : Risk of serious damage to eyes.  
Method : OECD Test Guideline 405

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

Remarks : Risk of serious damage to eyes.

### **Respiratory or skin sensitization**

#### **Skin sensitization**

May cause an allergic skin reaction.

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### Respiratory sensitization

Not classified based on available information.

#### Components:

##### **bronopol (Solution):**

Routes of exposure : Skin contact  
Species : Guinea pig  
Method : OECD Test Guideline 406  
Result : Does not cause skin sensitization.

##### **sodium nitrate:**

Routes of exposure : Skin contact  
Species : Mouse  
Method : OECD Test Guideline 429  
Result : Not a skin sensitizer.  
GLP : yes

##### **5-chloro-2-methyl-2H-isothiazol-3-one:**

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

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

Routes of exposure : Skin contact  
Species : Mouse  
Method : OECD Test Guideline 429  
Result : May cause sensitization by skin contact.

### Germ cell mutagenicity

Not classified based on available information.

#### Components:

##### **bronopol (Solution):**

Genotoxicity in vitro : Test system: Mammalian-Human  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 473  
Result: positive  
GLP: yes

Test system: Mammalian-Animal  
Metabolic activation: with and without metabolic activation  
Result: negative  
GLP: yes

Genotoxicity in vivo : Species: Mammalian-Animal

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Application Route: Oral  
Exposure time: 72 h  
Dose: 160 mg/kg  
Method: OECD Test Guideline 474  
Result: negative  
GLP: yes

Species: Mammalian-Animal  
Application Route: Oral  
Exposure time: 4 d  
Method: OECD Test Guideline 486  
Result: negative  
GLP: yes

### **5-chloro-2-methyl-2H-isothiazol-3-one:**

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

Genotoxicity in vivo : Test Type: Micronucleus test  
Species: Mouse  
Application Route: Oral  
Result: negative

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

Genotoxicity in vitro : Test system: Bacteria  
Method: OECD Test Guideline 471  
Result: negative

Test system: Mammalian-Animal  
Method: OECD Test Guideline 476  
Result: negative

Test system: Mammalian-Animal  
Method: OECD Test Guideline 473  
Result: negative

### **Carcinogenicity**

Not classified based on available information.

### **Components:**

#### **bronopol (Solution):**

Species : Rat, male and female  
Application Route : Oral  
Exposure time : 104 weeks  
Dose : 7 mg/kg body weight  
Result : negative

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- 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 based on available information.

### Components:

#### **bronopol (Solution):**

Effects on fertility      :    Species: Rat, male and female  
Application Route: Oral  
Duration of Single Treatment: 19 Weeks  
General Toxicity Parent: NOAEL: > 40 mg/kg body weight  
General Toxicity F1: NOAEL: > 40 mg/kg body weight  
Method: OECD Test Guideline 415

#### **5-chloro-2-methyl-2H-isothiazol-3-one:**

Effects on fertility      :    Species: Rat, male and female  
Application Route: Oral  
Dose: 72 milligram per kilogram  
Method: OECD Test Guideline 415  
GLP: yes  
Remarks: No known significant effects or critical hazards.

Effects on fetal development    :    Species: Rat, female  
Application Route: Oral  
Dose: > 139 milligram per kilogram  
Duration of Single Treatment: 20 d  
Frequency of Treatment: 9 daily  
Result: No teratogenic potential.

### **STOT-single exposure**

May cause respiratory irritation.

### Product:

Routes of exposure      :    Inhalation  
Assessment              :    The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

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### Components:

#### **bronopol (Solution):**

Routes of exposure : Inhalation  
Assessment : May cause respiratory irritation.

#### **STOT-repeated exposure**

Not classified based on available information.

#### **Repeated dose toxicity**

### Components:

#### **5-chloro-2-methyl-2H-isothiazol-3-one:**

Species : Rat, male and female  
NOAEL : > 18.75 mg/kg  
Application Route : Dermal  
Exposure time : 90 d  
Dose : > 18,75 mg/kg  
Remarks : Chronic toxicity

#### **Aspiration toxicity**

Not classified based on available information.

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## SECTION 12. ECOLOGICAL INFORMATION

### **Ecotoxicity**

#### Product:

Toxicity to fish : LC50 (Cyprinodon variegatus (sheepshead minnow)): 10 - 100 mg/l  
Exposure time: 96 h  
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 4.17 mg/l  
Exposure time: 48 h  
Remarks: Fresh water

Toxicity to algae/aquatic plants : IC50: 2.6 mg/l  
Exposure time: 72 h  
Remarks: Fresh water

### Components:

#### **bronopol (Solution):**

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 11 mg/l  
Exposure time: 96 h  
Method: EPA OPP 72-1 (Fish Acute Toxicity Test)  
GLP: yes  
Remarks: Fresh water

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Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.08 mg/l  
Exposure time: 48 h  
Method: OECD Test Guideline 202  
GLP: yes  
Remarks: Fresh water

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (microalgae)): 0.25 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201  
GLP: yes  
Remarks: Fresh water

NOEC (Pseudokirchneriella subcapitata (microalgae)): 0.03 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201  
GLP: yes  
Remarks: Fresh water

M-Factor (Acute aquatic toxicity) : 10

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.06 mg/l  
Exposure time: 21 Days  
Method: OECD Test Guideline 211  
GLP: yes  
Remarks: Fresh water

### **sodium nitrate:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203  
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l  
Exposure time: 48 h  
Method: OECD Test Guideline 202  
GLP: no

Toxicity to fish (Chronic toxicity) : NOEC (Pimephales promelas (fathead minnow)): 157 mg/l  
Exposure time: 32 d  
GLP: no

### **5-chloro-2-methyl-2H-isothiazol-3-one:**

Toxicity to fish : LC50 (Fish): 0.19 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other : EC50 (Daphnia): 0.84 mg/l

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aquatic invertebrates      Exposure time: 48 h

Toxicity to fish (Chronic toxicity) : LC50 (Salmo gairdneri): 0.14 mg/l  
Exposure time: 6 d

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

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 150 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.87 mg/l  
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (microalgae)): 0.157 mg/l  
Exposure time: 72 h

NOEC (Pseudokirchneriella subcapitata (microalgae)): 0.0104 mg/l  
Exposure time: 96 h

M-Factor (Acute aquatic toxicity) : 10

M-Factor (Chronic aquatic toxicity) : 1

Toxicity to microorganisms : EC50 (activated sludge): 31.7 mg/l  
Exposure time: 3 h

### **Persistence and degradability**

#### **Components:**

#### **bronopol (Solution):**

Biodegradability : aerobic  
Result: Readily biodegradable.  
Biodegradation: 51 - 57 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301B  
GLP: yes

#### **sodium nitrate:**

Biodegradability : Result: The methods for determining the biological degradability are not applicable to inorganic substances.

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

Biodegradability : Result: Not readily biodegradable.



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### Bioaccumulative potential

#### Components:

##### **bronopol (Solution):**

Bioaccumulation : Bioconcentration factor (BCF): 3.16

Partition coefficient: n-octanol/water : log Pow: -0.42  
Method: Calculated value

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

Partition coefficient: n-octanol/water : log Pow: -0.32

### Mobility in soil

#### Components:

##### **bronopol (Solution):**

Distribution among environmental compartments : Koc: 5

### Other adverse effects

No data available

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## 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.

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.

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### SECTION 14. TRANSPORT INFORMATION

#### International Regulations

##### IATA-DGR

UN/ID No. : UN 3082  
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.  
(BRONOPOL)  
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  
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S.  
(BRONOPOL)  
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

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### 49 CFR

UN/ID/NA number : UN 3082  
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s. (BRONOPOL)  
Class : 9  
Packing group : III  
Labels : 9



ERG Code : 171  
Marine pollutant : yes



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.

Hazard and Handling Notes. : Environmentally hazardous substance., Irritating to skin., Risk of serious damage to eyes, Keep away from foodstuffs, acids and alkalis

### 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.

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## SECTION 15. REGULATORY INFORMATION

### CERCLA Reportable Quantity

This material does not contain any components with a CERCLA 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  
Specific target organ toxicity (single or repeated exposure)

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

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sodium nitrate      7631-99-4       $\geq 1 - < 5 \%$

### US State Regulations

#### Massachusetts Right To Know

bronopol (Solution)      52-51-7       $\geq 5 - < 10$   
sodium nitrate      7631-99-4       $\geq 1 - < 5$

#### Pennsylvania Right To Know

water      7732-18-5       $> 1$   
bronopol (Solution)      52-51-7       $\geq 5 - < 10$   
sodium nitrate      7631-99-4       $\geq 1 - < 5$

#### 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.

No substances are subject to TSCA 12(b) export notification requirements.

#### FIFRA information

EPA registration number : 39967-79

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. The product is skin irritant. Harmful if swallowed or if inhaled. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

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## SECTION 16. OTHER INFORMATION

### Further information

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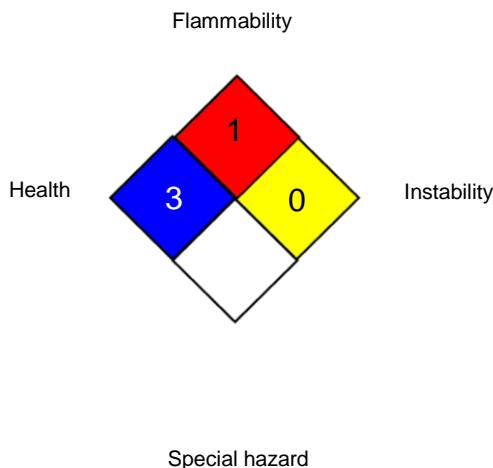
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### NFPA 704:



### HMIS® IV:

HEALTH	/	3
FLAMMABILITY		1
PHYSICAL HAZARD		0

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

AICS - Australian Inventory of Chemical Substances; 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;

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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

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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.