

SAFETY DATA SHEET

1. Identification

Identification

Product name: **BIOCLEAR 1000**

Additional identification

Chemical name: Mixture

Recommended use and restriction on use

Recommended use: Biocide
Restrictions on use: None identified.

Details of the supplier of the safety data sheet**Supplier**

Company Name: THE LUBRIZOL CORPORATION
Address: 29400 LAKELAND BOULEVARD
WICKLIFFE, OH 44092-2298
US
Telephone: (440)943-1200

Emergency telephone number:

FOR TRANSPORT EMERGENCY CALL CHEMTREC (+1)703 527 3887, OR WITHIN USA 800 424 9300

2. Hazard(s) identification

Hazard Classification**Health Hazards**

Acute toxicity (Oral)	Category 3
Acute toxicity (Inhalation - dust and mist)	Category 2
Skin Corrosion/Irritation	Category 1C
Serious Eye Damage/Eye Irritation	Category 1
Skin sensitizer	Category 1
Specific Target Organ Toxicity - Single Exposure	Category 3

Unknown toxicity

Acute toxicity, oral	0.0 %
Acute toxicity, dermal	0.0 %
Acute toxicity, inhalation, vapor	100.0 %
Acute toxicity, inhalation, dust or mist	2.0 %

Label Elements:

Hazard Symbol:



Signal Word:

Danger

Hazard Statement:

Fatal if inhaled.
Toxic if swallowed.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
May cause respiratory irritation.

Precautionary Statements:

Prevention:

Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. [In case of inadequate ventilation] wear respiratory protection. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing should not be allowed out of the workplace.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. If skin irritation or rash occurs: Get medical advice/attention. IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Specific treatment is urgent (see on this label). Wash contaminated clothing before reuse.

Storage:

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

Disposal:

Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards which do not result in GHS classification:

Corrosive. Causes irreversible eye damage. May be fatal if swallowed or inhaled. Harmful if absorbed through skin. This pesticide is toxic to fish.

3. Composition/Information on ingredients

General information:

Chemical name	CAS number	Percent by Weight
2,2-Dibromo-3-nitrilopropionamide	10222-01-2	90 - 100%

4. First-aid measures

Ingestion:	Rinse mouth. Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER/doctor.
Inhalation:	If breathing stops, provide artificial respiration. If breathing is difficult, give oxygen. Remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician or poison control center immediately.
Skin Contact:	Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Immediately call a POISON CENTER/doctor. Launder contaminated clothing before reuse.
Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

Most important symptoms/effects, acute and delayed

Symptoms: See section 11.

Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically.

5. Fire-fighting measures

General Fire Hazards: Avoid hose stream or any method which will create dust clouds.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use water spray, dry chemical or foam for extinction. CO2 may be ineffective on large fires.

Unsuitable extinguishing media: Not determined.

Specific hazards arising from the chemical: See section 10 for additional information.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Wear full protective firegear including self-containing breathing apparatus operated in the positive pressure mode with full facepiece, coat, pants, gloves and boots.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Evacuate area. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep upwind. Keep unauthorized personnel away. See Section 8 of the SDS for Personal Protective Equipment.

Methods and material for containment and cleaning up: Pick up free solid for recycle and/or disposal. Sweep up and place in a clearly labeled container for chemical waste. Avoid dust formation. Use wet sweeping compound or water to avoid raising a dust. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas.

Environmental Precautions: Avoid release to the environment. Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling: Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, on clothing. Do not get in eyes. Observe good industrial hygiene practices. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Launder contaminated clothing before reuse. Avoid environmental contamination.

Maximum Handling Temperature: Not determined.

Conditions for safe storage, including any incompatibilities: Keep container tightly closed. Store in a well-ventilated place.

Maximum Storage Temperature: Not determined.

8. Exposure controls/personal protection

Control Parameters:

Occupational Exposure Limits

None of the components have assigned exposure limits.

Appropriate engineering controls:

To prevent dust explosions employ bonding and grounding for operations capable of generating static electricity. Use material in well ventilated area only. Mechanical ventilation or local exhaust ventilation may be required.

Individual protection measures, such as personal protective equipment

General information:	Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Eye/face protection:	Use tight fitting goggles if dust is generated.
Skin Protection	
Hand Protection:	Suitable gloves can be recommended by the glove supplier. Chemical resistant gloves Polyvinyl chloride (PVC).
Other:	Wear apron or protective clothing in case of contact. Chemical resistant boots. Do not wear rings, watches or similar apparel that could entrap the material.
Respiratory Protection:	A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator. Use high efficiency particulate respirator with appropriate filter. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites.
Hygiene measures:	Observe good industrial hygiene practices. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get this material in contact with skin. Do not eat, drink or smoke when using the product. Do not get in eyes. Wash contaminated clothing before reuse. Wash hands before breaks and immediately after handling the product. Wash hands after handling.

9. Physical and chemical properties

Appearance

Physical state:	solid
Form:	Powder
Color:	White, Yellow
Odor:	Mild pungent
Odor threshold:	No data available.
pH:	4.8
Melting Point:	No data available.
Boiling Point:	No data available.
Flash Point:	Not applicable.
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.

Explosive limit - lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density:	0.934
Relative density:	2.21 60.1 °F (15.6 °C)
Solubility(ies)	
Solubility in water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Will not occur.
Conditions to avoid:	Excessive heat. Light. Heat may cause the containers to explode.
Incompatible Materials:	Strong acids. Strong oxidizing agents. Bases. Metals.
Hazardous Decomposition Products:	Thermal decomposition or combustion may generate smoke, carbon monoxide, carbon dioxide, nitrogen oxides, and other products of incomplete combustion. Hydrogen bromide and/or bromine

11. Toxicological information

Information on likely routes of exposure

Inhalation:	Fatal if inhaled.
Ingestion:	Toxic if swallowed.
Skin Contact:	Causes severe skin burns.
Eye contact:	Causes serious eye damage.

Information on toxicological effects

Acute toxicity

Oral	
Product:	ATEmix 50 - 300 mg/kg.
Dermal	
Product:	Not classified for acute toxicity based on available data.
Inhalation	
Product:	ATEmix (, 4 h): 0.05 - 0.5 mg/l. Dusts, mists and fumes

Skin Corrosion/Irritation:

Product: Causes severe skin burns.

Serious Eye Damage/Eye Irritation:

Product: Remarks: Causes serious eye damage.

Respiratory sensitization:

No data available

Skin sensitization:

2,2-Dibromo-3-nitrilopropionamide Classification: Skin sensitizer (Literature) Category 1B

Specific Target Organ Toxicity - Single Exposure:

2,2-Dibromo-3-nitrilopropionamide May cause respiratory irritation.

Aspiration Hazard:

No data available

Chronic Effects**Carcinogenicity:**

No data available

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity:

2,2-Dibromo-3-nitrilopropionamide This material has not exhibited mutagenic or genotoxic potential in laboratory tests.

Reproductive toxicity:

No data available

Specific Target Organ Toxicity - Repeated Exposure:

No data available

12. Ecological information**Ecotoxicity****Fish**

2,2-Dibromo-3- LC 50 (Fathead Minnow, 4 d): 2.2 mg/l

nitrilopropionamide	LC 50 (Rainbow Trout, 4 d): 0.71 mg/l LC 50 (Sheepshead Minnow, 4 d): 1.4 mg/l
Aquatic Invertebrates 2,2-Dibromo-3-nitrilopropionamide	EC 50 (Water flea (Daphnia magna), 2 d): 0.732 mg/l
Toxicity to Aquatic Plants 2,2-Dibromo-3-nitrilopropionamide	EC 50 (Green algae (Selenastrum capricornutum), 3 d): 0.3 mg/l
Toxicity to soil dwelling organisms	No data available
Sediment Toxicity	No data available
Toxicity to Terrestrial Plants	No data available
Toxicity to Above-Ground Organisms	No data available
Toxicity to microorganisms	No data available
Persistence and Degradability Biodegradation 2,2-Dibromo-3-nitrilopropionamide	OECD TG 301 B, 35 %, 28 d
Bioaccumulative Potential Bioconcentration Factor (BCF) 2,2-Dibromo-3-nitrilopropionamide	Bioconcentration Factor (BCF): 3
Partition Coefficient n-octanol / water (log Kow) 2,2-Dibromo-3-nitrilopropionamide	Log Kow: 0.79 (Measured)
Mobility:	No data available
Other Adverse Effects:	No data available.

13. Disposal considerations

Disposal instructions:	Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Dispose of packaging or containers in accordance with local, regional, national and international regulations. Empty container contains product residue which may exhibit hazards of product.
Contaminated Packaging:	Container packaging may exhibit hazards.

14. Transport information

DOT

UN Number:	UN 2928
UN Proper Shipping Name:	Toxic solids, corrosive, organic, n.o.s.(2,2-Dibromo-3-nitrilopropionamide)
Transport Hazard Class(es)	
Class:	6.1
Label(s):	6.1, 8
Packing Group:	II
Marine Pollutant:	Yes
Special precautions for user:	None established

IMDG

UN Number:	UN 2928
UN Proper Shipping Name:	TOXIC SOLID, CORROSIVE, ORGANIC, N.O.S.(2,2-Dibromo-3-nitrilopropionamide)
Transport Hazard Class(es)	
Class:	6.1
Label(s):	6.1, 8
EmS No.:	F-A, S-B
Packing Group:	II
Marine Pollutant:	Yes
Limited quantity	500.00G
Excepted quantity	E4
Special precautions for user:	None established

IATA

UN Number:	UN 2928
Proper Shipping Name:	Toxic solid, corrosive, organic, n.o.s.(2,2-Dibromo-3-nitrilopropionamide)
Transport Hazard Class(es):	
Class:	6.1
Label(s):	6.1, 8
Marine Pollutant:	Yes
Packing Group:	II
Limited quantity	1.00KG
Excepted quantity	E4
Environmental Hazards	Marine Pollutant
Special precautions for user:	None established
Other information	
Passenger and cargo aircraft:	Allowed.
Cargo aircraft only:	Allowed.

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

None known.

The DOT shipping information in this section is based on a bulk container. Please review the accompanying shipping papers for the correct shipping descriptions based the size of the package. Shipping descriptions may vary based on mode of transport, quantities, temperature of the material, package size, and/or origin and destination. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material. During transportation, steps must be taken to prevent load shifting or

materials falling, and all relating legal statutes should be obeyed. Review classification requirements before shipping materials at elevated temperatures.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4)

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 311 Classifications

Acute toxicity (any route of exposure)
Skin Corrosion or Irritation
Serious eye damage or eye irritation
Respiratory or Skin Sensitization
Specific target organ toxicity (single or repeated exposure)

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

None present or none present in regulated quantities.

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Federal Insecticide, Fungicide, Rodenticide Act (FIFRA)

This chemical is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

DANGER!
Corrosive.
Causes irreversible eye damage.
May be fatal if swallowed or inhaled.
Harmful if absorbed through skin.
This pesticide is toxic to fish.

US State Regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

Inventory Status

Australia (AICS)

All components are in compliance with chemical notification requirements in Australia.

Canada (DSL/NDSL)

This product is a registered pesticide regulated under the Pest Control Products Act (PCPA). It must be used in accordance with the provisions of the product label.

China (IECSC)

All components of this product are listed on the Inventory of Existing Chemical Substances in China.

European Union (REACH)

To obtain information on the REACH compliance status of this product, please e-mail REACH@SDSInquiries.com.

Japan (ENCS)

All components are in compliance with the Chemical Substances Control Law of Japan.

Korea (ECL)

All components are in compliance in Korea.

New Zealand (NZIoC)

All components are in compliance with chemical notification requirements in New Zealand.

Philippines (PICCS)

All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).

Switzerland (SWISS)

All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.

Taiwan (TCSCA)

All components of this product are listed on the Taiwan inventory.

United States (TSCA)

This product is a registered pesticide regulated under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). It may be only used in accordance with the provisions of the EPA approved product label in States that it is registered.

The information that was used to confirm the compliance status of this product may deviate from the chemical information shown in Section 3.

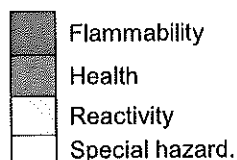
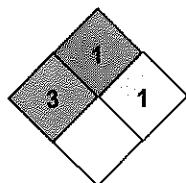
16. Other information, including date of preparation or last revision

HMIS Hazard ID

Health	3
Flammability	1
Physical Hazards	1

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

Issue Date: 09/13/2018

Version #: 3.3

Source of information: Internal company data and other publically available resources.

Further Information: Contact supplier (see Section 1)

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