

Drewbrom® PRECURSOR
® Registered Trademark, Ashland or its
subsidiaries
143420

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE
COMPANY/UNDERTAKING**

Ashland P.O. Box 2219 Columbus, OH 43216	Regulatory Information Number Telephone Emergency telephone	1-800-325-3751 614-790-3333 1-800-ASHLAND (1-800-274- 5263)
Product name	Drewbrom® PRECURSOR ® Registered Trademark, Ashland or its subsidiaries	
Product code	143420	
Product Use Description	No data	

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid, clear

Potential Health Effects

Exposure routes

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

Eye contact

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin contact

Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Passage of this material into the body through the skin is possible, and skin contact may be harmful.

Ingestion

Swallowing this material may be harmful.

Inhalation

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Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful.

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (for example, asthma-like conditions), eye

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways)

Target Organs

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: male and female reproductive fertility effects

Carcinogenicity

This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

Reproductive hazard

There are no data available for assessing risk to the fetus from maternal exposure to this material.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS-No.	Concentration
SODIUM BROMIDE	7647-15-6	>=38-<=42%

4. FIRST AID MEASURES

Eyes

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If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin

Immediately flush skin with water for at least 15 minutes while removing contaminated clothing and shoes. Seek immediate medical attention. Wash clothing before reuse and decontaminate or discard contaminated shoes.

Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician

Hazards: No information available.

Treatment: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsions may be needed.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water mist, Carbon dioxide (CO2), Dry chemical

Hazardous combustion products

May form:., Bromine, hydrogen bromide, Sodium oxides

Precautions for fire-fighting

No special fire hazards are known to be associated with this product. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

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6. ACCIDENTAL RELEASE MEASURES

Personal precautions

For personal protection see section 8. Persons not wearing proper personal protective equipment should be excluded from area of spill.

Environmental precautions

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

Methods for cleaning up

Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers. Absorb liquid on vermiculite, floor absorbent or other absorbent material.

7. HANDLING AND STORAGE

Handling

No data

Storage

Store in a cool, dry, ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

Not required under normal conditions of use. However, if unusual operating conditions exist, then provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below PEL/TLV(s).

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Eye protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

Skin and body protection

Wear chemical-resistant apron, or in emergency conditions, chemical-resistant clothing and boots.

Wear resistant gloves such as:
Neoprene

Respiratory protection

If overexposure has been determined or documented, a NIOSH-approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH respirators under specified conditions. (See your safety equipment supplier.) Engineering or administrative controls should be implemented to reduce exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid
Form	no data available
Colour	clear
Odour	slight
Boiling point/boiling range	223.0 °F / 106.1 °C
Melting point/range	no data available
Sublimation point	no data available
pH	8
Flash point	no data available
Ignition temperature	no data available
Evaporation rate	no data available
Lower explosion limit/Upper explosion limit	no data available
Particle size	no data available
Vapour pressure	23.333 hPa @ 68 °F / 20 °C Calculated Vapor Pressure
Relative vapour density	no data available
Density	1.43 g/cm ³ @ 70.00 °F / 21.11 °C
Bulk density	No data

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Water solubility	no data available
Solubility	no data available
Partition coefficient: n-octanol/water	no data available
log Pow	no data available
Autoignition temperature	no data available
Viscosity, dynamic	no data available
Viscosity, kinematic	no data available
Solids in Solution	no data available
Decomposition temperature	no data available
Burning number	no data available
Dust explosion constant	no data available
Minimum ignition energy	no data available

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

Avoid contact with:, temperature extremes

Incompatible products

Avoid contact with:, aluminum, anionic materials, oxidizable substances, strong acids

Hazardous decomposition products

May form:, Bromine, hydrogen bromide, Sodium oxides

Hazardous reactions

Product will not undergo hazardous polymerization.

Thermal decomposition

No data

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity
SODIUM BROMIDE

: LD 50 Rat: 4,200 mg/kg

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Acute inhalation toxicity

SODIUM BROMIDE : no data available

Acute dermal toxicity

SODIUM BROMIDE : LD 50
Rabbit:
> 2,000 mg/kg

12. ECOLOGICAL INFORMATION

Biodegradability

SODIUM BROMIDE : no data available

Bioaccumulation

SODIUM BROMIDE : no data available

Ecotoxicity effects

Toxicity to fish

SODIUM BROMIDE : 96 h LC 50 Fathead minnow (*Pimephales promelas*):
15,614.00 - 17,428.00 mg/L Method: Static; Mortality

Toxicity to daphnia and other aquatic invertebrates.

SODIUM BROMIDE : 48 h EC 50 Water flea (*Daphnia magna*): 5,700.00 -
10,800.00 mg/L Method: Static Intoxication

Toxicity to algae

SODIUM BROMIDE : no data available

Toxicity to bacteria

SODIUM BROMIDE : no data available

Biochemical Oxygen Demand (BOD)

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SODIUM BROMIDE : no data available

Chemical Oxygen Demand (COD)

SODIUM BROMIDE : no data available

Additional ecological information

SODIUM BROMIDE : no data available

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Dispose of in accordance with all applicable local, state and federal regulations. Do not discharge effluent containing this product into lakes, streams, ponds or estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit, and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution's Environmental Services Group at 800-637-7922.

14. TRANSPORT INFORMATION

REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
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U.S. DOT - ROAD

Not dangerous goods

U.S. DOT - RAIL

Not dangerous goods

U.S. DOT - INLAND WATERWAYS

Not dangerous goods

TRANSPORT CANADA - ROAD

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Not dangerous goods

TRANSPORT CANADA - RAIL

Not dangerous goods

TRANSPORT CANADA - INLAND WATERWAYS

Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

Not dangerous goods

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION

California Prop. 65

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

Acute Health Hazard

New Jersey RTK Label Information

WATER

7732-18-5

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SODIUM BROMIDE 7647-15-6

Pennsylvania RTK Label Information

WATER 7732-18-5
SODIUM BROMIDE 7647-15-6

Notification status

EU. EINECS y (positive listing)
US. Toxic Substances Control Act y (positive listing)
Australia. Industrial Chemical (Notification and Assessment) Act y (positive listing)
Canada. Canadian Environmental Protection Act (CEPA). y (positive listing)
Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 133)
Japan. Kashin-Hou Law List y (positive listing)
Korea. Toxic Chemical Control Law (TCCL) List y (positive listing)
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act y (positive listing)
China. Inventory of Existing Chemical Substances y (positive listing)

	HMIS	NFPA
Health	2	2
Flammability	0	0
Physical hazards	0	
Instability		0
Specific Hazard	--	--

16. OTHER INFORMATION

It is a violation of federal law to use this product in a manner inconsistent with its labeling. The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).
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ASHLAND
SAFETY DATA SHEET

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