



Cambridge Isotope Laboratories, Inc.
50 Frontage Road
Andover, MA 01810

Number:
Issue Date

DLM-1099
02/03/11

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MATERIAL SAFETY DATA SHEET

1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Description AMMONIUM BROMIDE (D4, 98%)

Cambridge Isotope Laboratories, Inc.
50 Frontage Rd
ANDOVER, MA 01810
USA

E-mail cilsales@isotope.com
Web Site www.isotope.com

Phone Numbers

Emergency Contact Chemtrec
Emergency Phone 1-800-424-9300 (24 hours)

Customer Service 1-800-322-1174 (8:30-5:30 EST)
Phone
Transportation 1-202-483-7616 (24 hours)

2 HAZARDS IDENTIFICATION

OSHA Hazards

Target Organ Effect

Target Organs

Central nervous system

GHS Label Information

Signal Word Warning

Hazards Identification

Exclamation mark

Hazard Statement(s)

Causes skin and eye irritation.
May be harmful if swallowed.

Precautionary Statement(s)

Dispose of contents/container to an approved waste disposal plant.
Wear protective gloves/protective clothing/eye protection/face protection.
IF IN EYES: Rinse with water for several minutes. Remove contact lenses.



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HMIS Ratings

Chronic Health	*
Physical	0
Flammability	0
Health	1

NFPA Codes

Fire	0
Health	0
Reactivity	0

Potential Health Effects

Eyes	Causes eye irritation.
Ingestion	May be harmful if swallowed.
Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin	May be harmful if absorbed through skin. May cause skin irritation.

3 COMPOSITION / INFORMATION ON INGREDIENTS

Composition / Information on Ingredients

Chemical Formula	ND4Br
Molecular Weight	101.97
CAS No.	12265-06-4
EC No.	235-183-8

4 FIRST AID MEASURES

First Aid Measures

Eyes	Flush eye with water for 15 minutes. Get medical attention.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Inhalation	If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
Skin	Wash with soap and plenty of water. Consult a physician.
Additional Information	Move out of dangerous area. Consult a physician and show this safety data sheet.



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5 FIRE FIGHTING MEASURE

Fire Fighting Measures

Extinguishing Media Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

Fire Fighting Equipment Wear self contained breathing apparatus for fire fighting if necessary.

6 ACCIDENTAL RELEASE MEASURES

Accidental Release Measures

Personal Precautions Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

Environmental Precautions Do not empty into drains.

Methods and materials for containment and cleanup Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

7 HANDLING AND STORAGE

Precautions for Safe Handling

Handling Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for Safe Storage

Storage Store at room temperature away from light and moisture.

8 EXPOSURE CONTROL / PERSONAL PROTECTION

Personal Protection

Eyes - Face Wear safety glasses with side shields (or goggles) and a face shield.

Skin Choose body protection according to the amount and concentration of the dangerous substance at the work place.



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Respiratory	When appropriate, use NIOSH/CEN approved respirator.
Protective Clothing	Wear suitable protective clothing and gloves.
Work Hygienic Practices	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9 PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties (Unlabeled Compound)

Form	Powder
Color	Colourless
pH	5.0 - 6.5 at 50 g/l at 25 °C (77 °F)
Melting Point	452 °C (846 °F) - lit.
Boiling Point	No data available
Flashpoint	Not applicable
Lower Explosion Limit	No data available
Upper Explosion Limit	No data available
Vapor Pressure	1 hPa (1 mmHg) at 197.7 °C (387.9 °F)
Density	2.43 g/mL at 25 °C (77 °F)
Solubility in Water	No data available
Auto Ignition Temperature	No data available

10 STABILITY AND REACTIVITY

Stability and Reactivity

Chemical Stability	Stable if stored under recommended conditions.
Conditions to Avoid	Avoid moisture.
Hazardous decomposition products	Formed under fire conditions: nitrogen oxides, Hydrogen bromide gas
Materials to avoid	Strong oxidizing agents, Strong acids, Strong bases, Heavy metals, Silver salts
Additional Information	Materials to Avoid: Potassium



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11 TOXICOLOGICAL INFORMATION

Acute Toxicity

LD50 Oral Rat 2,700 mg/kg
Serious Damage/Eye Irritation Eyes - rabbit - No eye irritation

Skin Corrosion/Irritation Skin - rabbit - No skin irritation

Inhalation No data available

Respiratory or Skin Sensitization Not available

Germ Cell Mutagenicity Not available

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

ACGIH No component of this product present at levels greater than or equal to 0.1% is identifiable as a carcinogen or potential carcinogen by ACGIH.

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

OSHA No component of this product present at levels greater than or equal to 0.1 % is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity Not available

Specific Target Organ Toxicity

Single Exposure No data available
Repeated Exposure No data available

Signs and Symptoms of Exposure

Confusion
Headache
Tremors
Anorexia
Bronchitis

The chemical, physical, and toxicological properties have not been thoroughly investigated.

Other Information

RTECS BO9155000



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12 ECOLOGICAL INFORMATION

Toxicity

Persistence and Degradability	Not available
Bioaccumulative Potential	Not available
Mobility in Soil	Not available
PBT and vPvB Assessment	Not available
Other Adverse Effects	Not available

13 DISPOSAL CONSIDERATIONS

Disposal Considerations

Product Disposal	Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.
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14 TRANSPORT INFORMATION

Transportation Information-DOT/IATA/IMDG

Special Shipping Notes	Not dangerous goods.
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15 REGULATORY INFORMATION

Regulatory Information

Target Organ Effect

SARA

Sara 302 Component	No chemicals in this material are subject to the reporting requirements.
Sara 313 Component	No chemicals in this material are subject to the reporting requirements.



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SARA 311/312 Hazards

Chronic (Y/N) Y

STATE REGULATIONS

Massachusetts Yes

Right to Know

Pennsylvania Right to Know Yes

New Jersey Right to Know Yes

California Proposition 65 This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Canada

DSL Status All components are on the Canadian DSL list.

EU

Hazard Harmful

Safety Statements

For waste disposal purposes, this product is not know to be defined or designated as hazardous by current provisions of the Federal (EPA) resource Conservation and Recovery Act (RCRA, 40CFR261).

Wear suitable protective clothing.

Risk Statements

Harmful if swallowed.

Irritating to eyes, respiratory system and skin.

16 OTHER INFORMATION

Additional MSDS Information This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

Approved On 02/03/11
Version Number 1