



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

Number:
Issue Date

DLM-8918
05/19/11

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MATERIAL SAFETY DATA SHEET

1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Description TRIMETHYLAMINE BORANE (D3, 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

Flammable solid, Irritant

GHS Classification

Flammable solids (Category 1)
Skin irritation (Category 2)
Eye irritation (Category 2)
Specific Target Organ Toxicity - Single exposure (Category 3)

GHS Label Information

Signal Word Danger

Hazards Identification

Flame
Exclamation mark

Hazard Statement(s)

Flammable solid.
Causes skin irritation.



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Causes serious eye irritation.

Precautionary Statement(s)

Keep away from heat/sparks/open flames/hot surfaces- No smoking.

Avoid breathing dust/fume/gas/mist/vapours/spray.

IF IN EYES: Rinse with water for several minutes. Remove contact lenses.

HMIS Ratings

Physical	3
Flammability	3
Health	2

NFPA Codes

Fire	3
Health	2
Reactivity	3

Potential Health Effects

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

3 COMPOSITION / INFORMATION ON INGREDIENTS

Composition / Information on Ingredients

Synonyms	Borane trimethylamine complex
Chemical Formula	D3BN(CH ₃) ₃
Molecular Weight	75.96
CAS No.	75-22-9 (unlabeled)
EC No.	200-850-4

4 FIRST AID MEASURES

First Aid Measures

Eyes	Flush eye with water for 15 minutes. Get medical attention.
Ingestion	Do NOT induce vomiting. 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.



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Additional Information Move out of dangerous area. Consult a physician and show this safety data sheet.

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.

Fire Fighting Procedures Use water spray to cool unopened containers.

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 Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleanup Sweep up and shovel. 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.



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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.
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	Crystalline
Color	White
pH	No data available
Melting Point	92 - 94 °C (198 - 201 °F)
Boiling Point	172 °C (198 °F)
Flashpoint	No data available
Lower Explosion Limit	No data available
Upper Explosion Limit	No data available
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	Heat, flames and sparks. Extremes of temperature and direct sunlight.



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Hazardous decomposition products Under fire conditions: Carbon oxides, nitrogen oxides, Borane/boron oxides

Materials to avoid acids, Acid chlorides, Acid anhydrides, Oxidizing agents, Alcohols

11 TOXICOLOGICAL INFORMATION

Acute Toxicity

Serious Damage/Eye Irritation No data available

Skin Corrosion/Irritation No data available

Inhalation No data available

Respiratory or Skin Sensitization Not available

Germ Cell Mutagenicity Genotoxicity in vitro - mouse - Ascites tumor
DNA inhibition, Other mutation test systems

IARC No component of this 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 identifiable 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 Inhalation - May cause respiratory irritation

Repeated Exposure No data available

Signs and Symptoms of Exposure

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

12 ECOLOGICAL INFORMATION

Toxicity



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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.

14 TRANSPORT INFORMATION

Transportation Information-DOT/IATA/IMDG

UN Number	1325
Prop. Ship. Name	Flammable solids, organic, n.o.s., (Trimethylamine-borane (1:1))
Hazard Class	4.1
Packing Group	II
Marine Pollutant	No
Poison Inhalation Hazard	No

15 REGULATORY INFORMATION

Regulatory Information

Flammable solid, Irritant

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

Fire (Y/N) Y

Acute (Y/N) Y

STATE REGULATIONS

Massachusetts No

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 This product contains the following components listed on the Canadian NDSL list. All other components are on the Canadian DSL list. Aminophenazone (CAS-No. 58-15-1)

EU

Hazard Flammable. Harmful.

Safety Statements

Keep away from ... (incompatible materials to be indicated by the manufacturer).

Keep away from sources of ignition - No smoking.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable protective clothing.

Risk Statements

Highly flammable.

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 05/19/11

Version Number 1