

Material Safety Data Sheet

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Emergency Phone Numbers:

CHEMTREC: 800-424-9300

POISON CENTER: 800-562-8236

Section 1:

Product Identification

Chemical Name(s) and Synonym(s): Boron

Formula: B

Chemical Family: Metal

Chem. Abstract No: 7440-42-8

Cal. Molecular Weight: 10.811

Section 2:

Ingredients/Summary of Hazards

| <u>Ingredient(s)</u> | <u>CAS #</u> | <u>%</u> | <u>TLV</u> | <u>OSHA PEL</u> |
|-----------------------------|---------------------|-----------------|-------------------|------------------------|
| Boron | 7440-42-8 | 100 | Not Set | Not Set |

Section 3:

Physical Data

Boiling Point (°C): 2600C

Density (gm/cc): 2.34

Vapor Pressure: 10(-8)Torr@1278c

% Volatile by Volume: N/A

Evaporation Rate: N/A

Melting Point (°C): 2100

Solubility w/ Water: Insoluble

Reaction w/ Water: None

Appearance/Odor: Yellow or brown amorphous powder. No odor.

Also can Be Black, hard pieces

Section 4:

Fire and Explosion Hazard Data

Flashpoint/Method: N/A

Autoignition Temp (°C): N/A

Flammability: Flammable As Dust or Fine Powder

Extinguishing Media: () Water () Foam () Class D Extinguisher

(x) Dry Chemical (x) CO² () Other

Special Fire Fighting Procedures: Wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

Usual Fire and Explosion Hazards: Unknown

**Section 5:
Health Hazard Data**

Toxicity Data: scu-mus LD50: 50mg/kg
Route(s) of Entry: Inhalation, Skin, and Ingestion

Effects of Overexposure (acute and chronic)

Inhalation: May cause irritation of nose, throat and eyes.
Dermal/Eye Contact: May Cause Irritation and Inflammation of the skin and eyes. May cause watering of eyes, swelling of eyelids and risk of serious injury to eyes.
Ingestion: Acute poisoning through ingestion has progressive symptoms of disagreeable taste, muscular twitching, nausea and vomiting, stomach pains, and diarrhea, anxiety, slow heart rate, convulsions, bluish face and lips, state of shock,
Other (specify): Considered an Industrial Poison. Boron poisoning causes depression of the circulation, persistent vomiting and diarrhea, followed by shock and coma.

Medical Conditions generally aggravated by exposure: Respiratory disorders.

Carcinogenicity: N/D **NTP:** No **IARC Monographs:** NO **OSHA Regulated:** NO

Emergency and First Aid Procedures:

Ingestion: Administer 1 to 2 Glasses of Milk or water and induce vomiting. Seek medical attention if condition persists.
Inhalation: Remove to fresh air. Administer oxygen if breathing is difficult. Seek Medical attention.
Skin: Brush Material off skin. Wash affected area with soap and water. Seek medical attention.
Eyes: Flush eyes with Luke warm water for 15 mins. Seek medical attention.

**Section 6:
Reactivity Data**

Stability: () stable (x) unstable
Conditions Contributing to instability: Air, Heat
Hazardous Decomposition Products: B(2)O(3)
Hazardous Polymerization: Will Not Occur
Conditions to Avoid: Air, Steam, Heat, Incompatible Materials

**Section 7:
Spill or Leak Procedures**

Steps to be taken in case material is released or spilled: Wear self contained breathing apparatus. Isolate area where spill has occurred. Insure proper ventilation. Vacuum up spill using high efficiency unit and place container for proper disposal.

Waste Disposal Method: Dispose of in accordance with applicable federal, state and local regulations.

Section 8

Special Protective Information

Respiratory Protection: (specify type) NIOSH approved respirator.
Ventilation: Local Exhaust: Maintain exposure below TLV
Protective Gloves: Neoprene
Eye Protection: Safety glasses with side shields
Other Protective Equip. Wear protective clothing to prevent contamination of skin and clothes

Section 9

Special Precautions and Transportation Regulations

Precautions to be taken in handling and storing: Store in tightly closed containers in a cool, dry place. Wash hands and face thoroughly before eating.

Transportation Requirements:

DOT Class: Not Classified

UN Number: "

IMCO Class: "

Other:

N/D = Do Data Found

N/A= Not Applicable

Revised: 01/07/05