SAFETY DATA SHEET

Date Printed: 03/29/2024
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SECTION 1. IDENTIFICATION

Product Identifier: (3N) 99.9% Boron Trichloride Dimethyloctylamine Complex

Product Code: BO-OMX-03

CAS Number: 34762-90-8

Relevant identified uses of the substance: Scientific research and development

Supplier details:

American Elements
10884 Weyburn Ave.
Los Angeles, CA 90024
Tel: +1 310-208-0551
Fax: +1 310-208-0351
Emergency telephone number:
+1 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

Emergency overview
See below for product details



Signal Word: Warning
Hazard statements
H373 May cause damage to the lung and the digestive system through prolonged or repeated exposure. Route of exposure: Inhalative.
Precautionary statements
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P314 Get medical advice/attention if you feel unwell.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Acute health effects
May be harmful if swallowed. Causes eye and skin irritation. Irritating to respiratory system. May cause allergic reaction. May decompose to irritating or corrosive components on exposure to water or high heat.

Chronic health effects
Prolonged or repeated contact may irritate the skin, causing dermatitis.

Signs/Symptoms of exposure
Irritation

Routes of exposure/entry
Skin Contact, Inhalation, Eye Contact

Target organs
Eyes, Gastrointestinal tract, Respiratory tract, Skin

Medical conditions aggravated by exposure

Pre-existing skin problems may be aggravated by prolonged or repeated contact.
Carcinogenic status
Not listed or regulated by IARC, NTP, OSHA, or ACGIH.

Reproductive effects
None Expected

Hazardous Decomposition Products:
Fumes, carbon dioxide, carbon monoxide, acrid smoke, hydrogen chloride

Conditions to avoid:
High heat, strong oxidizers

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name: Boron Trichloride Amine Complex (Boron Trichloride Dimethyloctylamine Complex)
Formula: BCl3C10H23N
Cas No.: 34762-90-8
Mol. Weight: 274.47

SECTION 4. FIRST AID MEASURES

Description of first aid measures

If irritation or other symptoms (as noted above) occur or persist from any route of exposure, remove the affected individual from the area: see a physician/get medical attention.

If inhaled:
Supply patient with fresh air. If not breathing, provide artificial respiration. Keep patient warm.
Seek immediate medical advice.

In case of skin contact:
Immediately wash with soap and water; rinse thoroughly.
Seek immediate medical advice.

In case of eye contact:
Rinse opened eye for several minutes under running water. Consult a physician.

If swallowed:

Seek medical treatment.

SECTION 5. FIREFIGHTING MEASURES

NFPA flammability class: IIIB
Flash point: >200 °F (>93.3 °C) Closed Cup
Explosive range:
LEL Not Available
UEL Not Available

Fire and explosive properties
Product is not considered a fire hazard, but will burn if ignited.

Extinguishing media
NFPA Class IIIB (Combustible liquid): Use water sp
ray, ABC dry chemical, foam or carbon dioxide. Water or foam may cause frothing. Use water to keep fire-exposed containers cool. Water spray may be used to flush spills away from exposures.
Fire fighting instructions
Wear self-contained breathing apparatus (SCBA) equipped with a full facepiece and operated in a pressure-demand mode (or other positive pressure mode) and approved protective clothing. Personnel without suitable respiratory protection must leave the area to prevent significant exposure to hazardous gases from combustion, burning or decomposition. In an enclosed or poorly ventilated area, wear SCBA during cleanup immediately after a fire as well as during the attack phase of firefighting operations.

Unusual fire/explosion hazards
Irritating or toxic substances will be emitted upon burning, combustion or decomposition.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Containment techinques
Contain by diking with sand, earth or other non-combustible material. If spilled in an enclosed area, ventilate. Do not flush liquid into public sewer, water systems or surface waters.

Clean-up techniques
Wear proper personal protective clothing and equipment. Do not flush liquid into public sewer, water systems or surface waters. Eliminate ignition sources. Absorb spill with an inert material. Place into labeled, closed container; store in safe location to await disposal.

Evacuation instructions
Not Applicable

SECTION 7. HANDLING AND STORAGE

Avoid contact with skin, eyes, and clothing. Avoid inhalation of vapors. Wash thouroughly after handling.

Keep in closed or covered containers when not in use. Store in a cool, dry place with adequate

ventilation. Do not store near heat or open flames.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation
Use and store only with adequate ventilation or use respiratory protection.

Respiratory
If vapors are present, use a NIOSH/MSHA approved positive pressure, supplier air respirator.

Eye protection
If potential for splashing is present, splash goggles or a full-face shield should be worn.

Skin protection
Do not allow any skin contact. If potential for skin contact is present, impervious protection clothing should be worn. Neoprene coated fabric is recommended for this application.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colorless to yellow
Melting Point: 25-28°C
Water by KF: 0.1% max
Free DMOA: 0.8% max
pH: 3.5-6

Odor: Very slight
Vapor Density: Heavier than air
Vapor Pressure: <1mm Hg at 25°C
Solubility in water: Slight
Specific Gravity: 1.1

SECTION 10. STABILITY AND REACTIVITY

Stable, will react with oxidizing agents

Hazardous Polymerization: Will not autopolymerize

Conditions to avoid
Avoid exposure to moisture, ignition sources and elevated temperatures.

Incompatibility with other materials
Avoid contact with strong oxidizing agents.

Hazardous decomposition products
Thermal decomposition may produce smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion. Hydrogen chloride. Boron trichloride. Oxides of nitrogen.

Additional reactivity / stability information
None

Thermal processing emissions
Not Applicable

SECTION 11. TOXICOLOGICAL INFORMATION

LD50 Oral:
>5,000 mg/kg
LC50 Inhalation:
>2,500 mg/kg
Exposure Limits:
TLV: Not established
PEL: Not established

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

Acquatic toxicity: No data available

Persistence and degradability No data available

Behavior in environmental systems: Bioaccumulative potential No data available

Mobility in soil: No data available

Additional ecological information:

General notes: Do not allow material to be released to the environment without official permits.

Results of PBT and vPvB assessment
PBT: N/A
vPvB: N/A

Other adverse effects No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Remove contaminated materials for disposal at a permitted facility using registered transporters.

SECTION 14. TRANSPORT INFORMATION

Not hazardous for tranportation

Department of transportation 49CFR172.101-102
Classification: Not hazardous
DOT shipping name: Not regulated

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Product related hazard informations:
Observe the general safety regulations when handling chemicals

National regulations
All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

All components of this product are listed on the Canadian Domestic Substances List (DSL).
Information about limitation of use: For use only by technically qualified individuals.

Other regulations, limitations and prohibitive regulations
REACH - Pre-registered substances Substance is listed.
Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.