

TCI AMERICA SAFETY DATA SHEET

Revision number: 1 Revision date: 07/06/2018

1. IDENTIFICATION

Product name: Dimethylamine Borane

Product code: D1842

Product use: For laboratory research purposes. Restrictions on use: Not for drug or household use.

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Emergency telephone number:

Chemical Emergencies:

TCI America (8:00am - 5:00pm) PST

+1-503-286-7624

Transportation Emergencies:

Chemtrec 24-Hour

+1-800-424-9300 (U.S.A.)

+1-703-527-3887 (International) Responsible department:

TCI America

Environmental Health Safety and Security

+1-503-286-7624

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200: Acute Toxicity - Oral [Category 3]

WHMIS 2015: Acute Toxic

Acute Toxicity - Dermal [Category 3] Eye Damage/Irritation [Category 1] Flammable Solids [Category 1] Skin Corrosion/Irritation [Category 1B]

Signal word: Danger!

Hazard Statement(s): Flammable solid

Toxic if swallowed or in contact with skin Causes severe skin burns and eye damage

Pictogram(s) or Symbol(s):



Precautionary Statement(s):

[Response]

[Prevention] Keep away from heat, sparks, open flames and hot surfaces. – No smoking. Ground and bond

container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Do not breathe dusts or mists. Do not eat, drink or smoke when using this product. Wash hands and

face thoroughly after handling. Wear protective gloves, protective clothing, face protection.

If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a poison center or doctor. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. Immediately call a poison center or doctor.

[Storage] Store locked up.

[Disposal] Dispose of contents and container in accordance with local, regional, national regulations (e.g. US: 40

CFR Part 261, EU:91/156/EEC, JP: Waste Disposal and Cleaning Act, etc.).

Hazards not otherwise classified:

[HNOC]

May develop pressure

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance

Components: Dimethylamine Borane

Percent: >95.0%(T) CAS RN: 74-94-2 Molecular Weight: 58.92 **Chemical Formula:** C2H7N·BH3

Synonyms: Borane - Dimethylamine Complex, DMAB

4. FIRST-AID MEASURES

Description of first aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a

POISON CENTER or doctor/physician.

Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Skin contact:

Immediately call a POISON CENTER or doctor/physician.

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Eye contact:

Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting. Ingestion:

Symptoms/effects:

Acute: Pain. Redness. Delayed: No data available

Indication of any immediate medical attention:

Not available.

Notes to physician: No data available

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Dry chemical, foam, water spray, carbon dioxide.

Hazardous combustion products:

These products include: Carbon oxides Nitrogen oxides Borates

Closed containers may explode from heat of a fire. Other specific hazards:

Advice for firefighters: Wear self-contained breathing apparatus if possible.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Environmental precautions:

Methods and materials for containment and cleaning up:

Prevention of secondary hazards:

Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

Prevent product from entering drains.

Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations. Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use

spark-proof tools and explosion-proof equipment.

7. HANDLING AND STORAGE

Precautions for safe handling: Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent

dispersion of dust. Keep away from heat/sparks/open flame/hot surfaces. -No smoking. Take measures to prevent the build up of electrostatic charge. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a local exhaust if dust or aerosol will be generated.

Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container tightly closed. Store in an explosion-poof refregerator.

Store under inert gas. Store locked up.

Store away from incompatible materials such as oxidizing agents.

Heat-sensitive Air-sensitive

Packaging material: Comply with laws. Dimethylamine Borane TCI AMERICA Page 3 of 5

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Appropriate engineering controls: Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed

system or local exhaust. Also install safety shower and eye bath.

Personal protective equipment

Respiratory protection: Dust respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators

approved under appropriate government standards and follow local and national regulations.

Hand protection: Impervious gloves.

Eye protection: Safety goggles. A face-shield, if the situation requires.

Skin and body protection: Impervious protective clothing. Protective boots, if the situation requires.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Solid

Form: Crystal - Powder Colour: White

Odour:Amine-likeOdor threshold:No data availableOdour threshold:No data available

Melting point/freezing point: 37°C (99°F) No data available pH: Boiling point/range: No data available No data available. Vapour pressure: **Decomposition temperature:** No data available Vapour density: No data available No data available **Dynamic Viscosity:** Relative density: No data available

Kinematic viscosity: No data available

Log Pow:No data availableEvaporation rate(ButylNo data available

Acetate=1):

Flash point: 43°C (109°F) Autoignition temperature: 175°C (347°F)

Flammability(solid, gas): No data available Flammability or explosive limits:

Lower: No data available
Upper: No data available

Solubility(ies):

[Water] No data available

[Other solvents]

Soluble: Methanol

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Stable under proper conditions.

Possibility of hazardous reactions: No special reactivity has been reported.

Conditions to avoid: Spark, Open flame, Static discharge

Incompatible materials: Oxidizing agents, Acids, Water, Oxygen, Heavy metal salts

Hazardous decomposition products: Carbon monoxide, carbon dioxide etc

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11. TOXICOLOGICAL INFORMATION

RTECS Number: IP9450000

Acute Toxicity:

ipr-mus LD50:200 mg/kg ipr-rat LD50:39 mg/kg orl-rat LD50:59 mg/kg skn-rbt LD50:210 mg/kg

Skin corrosion/irritation:

skn-rbt 50 mg MLD

Serious eye damage/irritation:

eye-rbt 10 mg

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:

dni-mus-ast 100 umol/L oms-mus-ast 100 umol/L

Carcinogenicity: No data available

> IARC: No data available NTP: No data available OSHA: No data available

Reproductive toxicity: No data available

Target organ(s): No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity:

No data available Fish: No data available Crustacea: Algae: No data available

Persistence / degradability:

Bioaccumulative potential(BCF):

Mobility in soil

No data available No data available

Log Pow: No data available No data available Soil adsorption (Koc): Henry's Law (PaM 3/mol): No data available

13. DISPOSAL CONSIDERATIONS

Disposal of product: Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and

Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for

Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil.

Disposal of container: Dispose of as unused product. Do not re-use empty containers.

Other considerations: Observe all federal, state and local regulations when disposing of the substance. **Dimethylamine Borane TCI AMERICA** Page 5 of 5

14. TRANSPORT INFORMATION

DOT (US)

UN number: Proper Shipping Name: Class or Division: Subrisk(s): **Packing Group:**

UN2926 Flammable solids, toxic, organic, n.o.s 4.1 Flammable solid 6.1 Toxic material.

IATA

Class or Division: **UN number: Proper Shipping Name:** Subrisk(s): **Packing Group:**

UN2926 Flammable solid, toxic, organic, n.o.s 4.1 Flammable solid 6.1 Toxic material.

IMDG

er:

UN2926 Class or Division: UN **Proper Shipping Name:** Subrisk(s): **Packing Group:**

numb Flammable solid, toxic, organic, n.o.s 4.1 Flammable solid 6.1 Toxic material.

F-A, S-G EmS number:

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):

This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.

US Federal Regulations

CERCLA Hazardous substance and Reportable Quantity:

SARA 313: Not Listed Not Listed **SARA 302:**

State Regulations State Right-to-Know

Massachusetts Not Listed Not Listed **New Jersey** Pennsylvania Not Listed California Proposition 65: Not Listed

Other Information

NFPA Rating: **HMIS Classification:** Health: 2 Health: 2 Flammability: 2 Flammability: 2 3 3 Instability: Physical:

International Inventories

Canada: DSL On DSL EC-No: 200-823-7

16. OTHER INFORMATION

Revision date: 07/06/2018 Revision number: 1

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.