



太和气体(荆州)有限公司
Taihe Gases (Jingzhou) Limited

Material Safety Data Sheet for: Trimethyl boron (TMB)

1. IDENTIFICATION

Product Name: Trimethyl boron

Other Name:

Recommended use of the chemical and restrictions on use: For organic synthesis. Used in solar, semiconductor and other industries.

Supplier's details:

Company name: Taihe Gases (Jingzhou) Limited

Factory address: No.20 Jingjian Road, Jingzhou Development Zone, Jingzhou City, Hubei Province, P. R. China

Tel: 86-0716—8359158

Fax: 86-0716-8336190

Emergency phone number: 0532-83889090

2. HAZARDS IDENTIFICATION

Emergency Overview:

Extremely easy gas.

GHS Label elements, including precautionary statements:



Potential Health Effects

Inhalation: Move people to fresh air and maintain a comfortable breathing posture. Call the Poison Center/doctor.

Eye contact: Rinse carefully for a few minutes with water. If you wear contact lenses and can be easily removed, remove contact lenses. continue to rinse. If the eye is still stimulating: a doctor.

Skin contact: Immediately remove all contaminated clothing, wash the rear can be reused, water cleaning skin/shower.

3. COMPOSITION/INFORMATION ON INGREDIENTS



component:

Components	CAS No.	Concentration(Volume)
Trimethyl Boron	593-90-8	99.5%

4. FIRST AID MEASURES

General advice:

Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped. Use chemically protective clothing.

Eye Contact:

Lift the eyelids and rinse with flowing water for 15 minutes. Medical treatment.

Skin contact:

Remove the contaminated clothing and rinse with flowing water. If there is burns, medical treatment.

Ingestion:

Will not be contacted through this pathway.

Inhalation:

From the scene to the fresh air. If breathing is difficult, give oxygen. Medical treatment.

Notes to physician Treatment:

Treat bronchospasm and laryngeal edema if present. Observe for delayed chemical pneumonitis, pulmonary hemorrhage or edema.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Use dry powder, carbon dioxide to extinguish fire. Prohibition of water and foam extinguishing.

Specific hazards:

Gas under extremely flammable pressure. Oxygen, air can cause spontaneous combustion and explosion. Fire and oxidant are in danger of explosion.

Special protective equipment for fire-fighters:

Use self-contained breathing apparatus and chemically protective clothing.

6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**

Rapid evacuation of the contaminated areas to the upper edge of the wind, isolated from the contaminated zones, restricted access. Cut off the ignition. It is recommended that emergency handlers wear a self-contained positive pressure respirator and wear an antivirus suit. Enter the scene from the upper edge. Do not contact the leaking material directly.

Environmental precautions:

Prevent the diffusion of gases through sewers, ventilation systems and restricted spaces. Nearby sewers and other places to prevent gas from entering.

Methods for cleaning up:

Cut off the source of the leak as much as possible. Cover the leak point with an industrial cover or a absorbent/absorbent agent. If there is no danger, burn at the same time, spray-shaped water to cool the surrounding, in case other combustible materials on fire. or piping to the furnace, concave ground burning. Leak containers should be properly treated, repaired, inspected and then used.

Additional advice:

Large releases may require considerable downwind evacuation. If possible, stop flow of product. Increase ventilation to the release area and monitor concentrations. If leak is from cylinder or cylinder valve, call the Taihe gas emergency telephone number. If the leak is in the user's system, close the cylinder valve, safely vent the pressure, and purge with an inert gas before attempting repairs.

7. HANDLING AND STORAGE**Handling:**

Airtight operation, pay attention to ventilation. Operators must undergo specialized training and strictly follow the operating procedures. It is recommended that the operator wear a self priming filter type gas mask (half mask), wear chemical safety protective glasses, wear anti-virus to penetrate overalls, wear latex gloves. Stay away from fire, heat, smoking is prohibited in the workplace. Use of explosion-proof ventilation systems and equipment. Prevent gas from leaking into the workplace air. Avoid contact with oxidant or halogen. Light and unload lightly when handling to prevent breakage of cylinders and accessories. Equipped with corresponding varieties and quantities of fire equipment and leakage emergency treatment equipment. Empty containers may have residues of harmful materials.

Storage:

Store in a cool, dry, well ventilated warehouse. Keep away from fire and heat. Cuvin not exceeding 25°C, relative humidity not exceeding 75%. Keep the container sealed. Should be stored separately with oxidant, halogen, edible chemicals, avoid mixed storage. The use of



explosion-proof lighting, ventilation facilities. The use of mechanical equipment and tools that produce sparks is prohibited. Leakage emergency treatment equipment should be available in the storage area.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures:

Airtight operation, pay attention to ventilation. Provides safe showers and eye-cleaning equipment.

Personal protective equipment:

Respiratory protection: When the air concentration exceeds the standard, it is recommended to wear a self priming filter type gas mask (half mask). When emergency rescue or evacuation, should wear air respirator.

Hand protection: Wear latex Gloves.

Eye protection: Wearing chemical safety protective glasses.

Skin and body protection: Wear anti-virus to infiltrate overalls.

Exposure limit(s): No data is available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquefied gas
Color:	Colorless
Odor:	no data
Molecular Weight:	55.99g/mol
Relative vapor density:	1.48 (air = 1)
Relative density:	0.63 (water = 1)
Vapor pressure:	no data
Boiling point/range:	-20 °C
Critical temperature:	no data
Melting point/range:	-161.5 °C
Water solubility:	Insoluble in water

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Materials to avoid: Damp air. Keep away from fire and heat.



11. TOXICOLOGICAL INFORMATION

Acute Health Hazard:

Ingestion: No data is available on the product itself.

Ingestion – Components Hydrogen chloride: No data is available on the product itself.

Inhalation: No data is available on the product itself.

Skin: No data is available on the product itself.

Chronic Health Hazard:

Inhalation of this product may cause nausea, headache, vomiting, cough, chest pain, dyspnea and other symptoms

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Aquatic toxicity: No data available.

Toxicity to other organisms: No data available.

Persistence and degradability

Mobility: No data available.

Bioaccumulation: No data is available on the product itself.

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:

In accordance with local and national regulations. Return unused product in original cylinder to supplier. Contact supplier if guidance is required. Must not be discharged to atmosphere.

Contaminated packaging: Return cylinder to supplier.

14. TRANSPORT INFORMATION

Dangerous goods number: 42028

UN No: 3160

Proper shipping name: Trimethyl Boron

Class: 2.3

Risk label: Toxic gas; flammable gas





Packing: gas cylinder

Transportation considerations: When transporting gas cylinders, they should be placed neatly.

When placed horizontally, the ends of the bottles should be aligned. When standing, properly fix them to prevent the cylinders from falling over. Wear caps (except for cylinders with protective cover), lightly load and unload. , slip, roll, touch, hit, hit the cylinder. The transport vehicle shall have a dangerous cargo transport sign and a satellite positioning device with a driving record function. Without the approval of the public security organ, the transport vehicle shall not enter the restricted traffic area of the dangerous chemicals transport vehicle. Transportation vehicles should be equipped with the appropriate variety and quantity of fire-fighting equipment and leakage emergency treatment equipment. The vehicle exhaust pipe carrying the item must be equipped with a fire arresting device. It is forbidden to use mechanical equipment and tools that are prone to sparks. It is strictly forbidden to mix and mix with oxidants, halogens and food chemicals. Summer should be transported in the morning and evening to prevent sun exposure. Keep away from fire and heat sources when you stop. When transporting by road, follow the prescribed route and do not stay in residential areas and densely populated areas. It is forbidden to leave when transporting by rail.

15. REGULATORY INFORMATION

Domestic chemical safety management regulations:

GB16483-2008 , GB13690-2009 , GB6944-2005 , GB/T15098-2008 , GB18218-2009 , GB15258-2009, GB6944-2005, GB190-2009, GB191-2009, GB12268-2008, GB/T15098-2008, GB30000.2-2013~GB30000.29-2013

16. OTHER INFORMATION

Reference:

UN RTDG

Globally Harmonized System of Classification and Labelling of Chemicals

ICSC

Apply date: 2018-06-04