

GHS Safety Data Sheet

SDS No. : BBR02LAEG

Date Issued: 2008/08/29

Last updated: 2018/02/19

Section 1. Identification of the substance or mixture and of the supplier

1.1 Product Information

Product name: B(OC₂H₅)₃ Boron triethoxide

Product number:	Purity	Form
BBR02LB	99.999%(5N)	liquid
—	99.9999%(6N)~99.999999%(8N)	liquid

1.2 Company Information:

Manufacturer : Kojundo Chemical Laboratory Co., Ltd.
 1-28, 5-chome, Chiyoda, Sakado-shi, Saitama Japan 350-0284
 Phone: +81-49-284-1511 Fax: +81-49-284-1351
 Emergency Phone : +81-49-284-1511

Section 2. Hazards identification

GHS Classification

Health Hazards	Environmental Hazards	Physical Hazards
No data available	No data available	Flammable Liquid : Category 2 Pyrophoric liquids : Not classified Oxidizing liquids : Not classified

GHS Label : F

Pictograms or symbols



Warning word : Danger

Hazard information	Description of precaution
Highly flammable liquid and vapor	Keep away from heat/sparks/open flames/hot surfaces. No smoking. Use explosion-proof electrical/ ventilating/ lighting equipment. Take precautionary measures static discharge. Wear protective gloves/protective clothing/eye protection/respiratory protection /face protection during handling. Avoid breathing mist/vapors/spray. Do not eat, drink or smoke when using this product, and wash hands thoroughly after handling. Take off the contaminated clothing and wash before reuse. Keep container or bottle tightly closed when not in use. In case of fire: Use dry chemical, CO ₂ , dry sand or alcohol resistance foam. IF ON SKIN: Wash skin with plenty of soap and water. If skin irritation occurs, get medical advice/attention. Call a POISON CENTER or doctor/physician if you feel unwell. Protect from sunlight. Store in a cool, dry and well-ventilated place. Keep container tightly closed. Dispose of contents/ container in accordance with local/national regulations.

Additional hazard information :

Contact with water liberates flammable organic vapor.

With respect to additional hazard information, see Section 11.

Section 3. Composition / information on ingredients

Chemical or common name:	Triethyl borate
Chemical formula:	B(OC ₂ H ₅) ₃
Single Substance or Compound:	Single substance
Composition:	100%
CAS #:	150-46-9
RTECS#:	ED5075000
TSCA inventory :	listed
EINECS:	2057609

Section 4. First aid measures

Eye contact:	Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.
Skin contact:	Promptly flush contaminated skin with soap or mild detergent and water. Contact physician if irritation continues.
Ingestion:	Rinse mouth and throat with water. Get medical attention immediately.
Inhalation:	Remove the exposed person immediately and provide fresh air. Get medical attention.

Section 5. Fire fighting measures

Extinguishing media:	Carbon dioxide, dry chemical powder, dry sand or alcohol resistance foam. DO NOT use a direct water stream.
Fire fighting:	Highly flammable material. Will be easily ignited by heat, sparks or flames. Remove containers to safe place if possible. Use water spray to Cool down nearby structures and containers. In case of fire, may liberate toxic gases/ fume. Self-contained breathing apparatus and full protective clothing should be used, if the material is involved in fire.
Explosion hazards:	Heating may cause an explosion.

Section 6. Accidental release measures

Personal Precautions:	Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its mist/ fume / vapors.
Environmental hazard precautions:	Shut off leak if without risk. Prevent flow out to river, etc. so as not to badly affect.
Method for containment and cleaning up:	Remove all sources of ignition. Avoid unnecessary contacts with spills. Indoor leakage: Ventilate as much as possible until the cleaning is completed. Outdoor leakage: Work from the windward and evacuate the leeward crowd. Absorb or cover with vermiculite or other suitable absorbent, and dispose of DOT-approved waste containers as much as possible. Carefully wash spill site with plenty of water after material pick up.

Section 7. Handling and storage

Precautions to be taken in handling:

Safe handling: Handle the material in a dry inert gas atmosphere, utilizing glove bag or glove box. Keep away from moisture when handling.
 Keep container or bottle tightly closed when not in use.
 Avoid prolonged or repeated exposure.
 Handling worker wears suitable protective clothing.
 Keep away from heat, sparks and naked flame.
 Electrically ground all equipment when handling this material.

Precautions to be taken in storage:

General precautions: Store the material in a sealed container.
 Store in a cool, dry, well ventilated and dark place away from incompatible materials.
 Keep away from any heat, sparks, and flames.

Section 8. Exposure controls / personal protection

Exposure guideline: ACGIH (2013): No data available
 OSHA (2006) : No data available

Facility measures: Local ventilation of closed work room or total proper ventilation to prevent inhalation.

Protective ware: Wear appropriate NIOSH/MSHA-approved respirator, safety goggles, impervious gloves, protective wear, protective boots.

Section 9. Physical and chemical properties

Color and Form: Colorless liquid

Chemical formula: $B(OC_2H_5)_3$

Formula weight: 146.0

Melting point: $-85^{\circ}C$

Boiling point: $117^{\circ}C$

Density: 0.85 g/cm^3

Solubility(Water): Decomposes
 (Dissoluble): Miscible in organic solvents.

Flammability: Flammable substance.

Flash point: $24.3^{\circ}C$ (closed cup)

Autoignition Temperature $290^{\circ}C$

Oxidation: None

Section 10. Stability and reactivity

Stability: Stable in an inert gas atmosphere under room temperature.
 Decomposed by moisture in the air.

Reactivity

Incompatibility: Strong oxidizing agents, strong acids.

Condition to avoid: Heat, water and moisture.

Hazardous decomposition products.: Carbon oxides, boron oxides and toxic fumes.

Section 11. Toxicological information

Acute toxicity:	GHS : No data available.
Skin corrosive / irritation:	GHS : No data available.
Serious eyes damage / eye irritation:	GHS : No data available.
Respiratory sensitization:	GHS : No data available.
Skin sensitization:	GHS : No data available.
Germ cell mutagenicity:	GHS : No data available.
Carcinogenicity:	GHS : No data available.
Reproductive toxicity:	GHS : No data available.
Specific target organ toxicity —single exposure:	GHS : No data available.
Specific target organ toxicity —repeated exposure:	GHS : No data available.
Aspiration hazard:	GHS ; No data available.

Section 12. Ecological information

Ecotoxicity:	
Hazards to the aquatic environment—acute toxicity:	GHS : No data available
Hazards to the aquatic environment—chronic toxicity:	GHS : No data available
Hazardous to the ozone layer:	GHS : No data available No Freon or Halon
Fish toxicity:	No data available
Degradability:	No data available
Bioaccumulative potential:	No data available
Mobility in soil:	No data available

Section 13. Disposal considerations

Disposal method: User of the product should contract with the local government or licensed 'Industrial Waste Haulers' for disposal of waste.

Section 14. Transport information

UN number:	1176
IATA shipping name:	Ethyl borate
IATA classification:	Hazardous Class 3 (Flammable liquid)
IATA packing group:	II
HS code:	2920.90
Marine pollution:	None

Section 15. Regulatory information

TSCA inventory : listed.
Please refer to any other local / national measures that may be relevant.

Section 16. Other information

The information described above is believed to be correct. However, Kojundo Chemical Lab. makes no representation, warranty nor guarantee of any kind with respect to the information on this data sheet or any use of the product based upon this information.