

LIQUID BORON 9%

Material Safety Data Sheet (rev.01/05)

SECTION I PRODUCT IDENTIFICATION

| | |
|--|--|
| | NFPA HAZARD RATINGS |
| HEALTH HAZARD N/ A | FIRE HAZARD N/ A REACTIVITY N/ A |
| SARA/ TITLE III HAZARD CATEGORIES | |
| Immediate (ACUTE) Health: NO | Reactive Hazard: NO |
| Delayed (Chronic) Health: NO | Fire Hazard: NO Sudden Release of Pressure: NO |
| Company Name: | STOLLER USA, INC. |
| Address: | 4001 W. Sam Houston Parkway, N., Suite 100 Houston, Texas 77043-1226 U.S.A. |
| Emergency Phone Number: | CHEMTREC: In the U.S. and Canada call Toll-free: 1 (800) 424-9300 From other countries call collect: 1 (703) 527-3887 |
| Phone Number for Information: | 1 (800) 539-5283 or 1 (713) 461-1493 |
| Chemical Family: | Mono Borate |
| Chemical Name & Synonyms: | Boric Acid |
| Formula: | Proprietary |
| Trade name & Synonyms: | LIQUID BORON 9% |

SECTION II PHYSICAL AND CHEMICAL CHARACTERISTICS

| | | | |
|---------------------|-------------|------------------|----------------------------|
| INGREDIENTS: | CAS# | Approx. % | TLV |
| Ferrous Chloride | 10125-13-0 | 0.13% | 1 mg/ m ³ as Cu |

SECTION III PHYSICAL AND CHEMICAL CHARACTERISTICS

| | | | |
|------------------------------------|--------------------|---------------------------------|------|
| BOILING POINT: | 206° F | VAPOR PRESSURE (mm/ Hg): | |
| MELTING POINT: | N/ A | VAPOR DENSITY (air = 1): | N/ A |
| SPECIFIC GRAVITY: | 1.26 | REACTIVITY IN WATER: | N/ A |
| SOLUBILITY IN WATER: | 100% | EVAPORATION RATE: | <1 |
| APPEARANCE AND ODOR: | Blue with no odor. | | |
| PERCENT VOLATILE BY VOLUME: | | Proprietary | |
| pH: | 7 | | |

SECTION IV FIRE AND EXPLOSION DATA

| | | | |
|--|--|-------------|-------------|
| FLASH POINT: | 216° Closed cup | LEL: | UEL: |
| FLAMMABLE LIMITS: | Not Established | | |
| EXTINGUISHER MEDIA: | Water, CO ₂ or Dry Chemicals, Alcohol Foam. | | |
| SPECIAL FIRE FIGHTING PROCEDURES: | Wear self- contained breathing apparatus, rubber boots and clothing. | | |
| UNUSUAL FIRE AND EXPLOSION HAZARDS: | Toxic fumes may be generated at elevated temperatures. | | |

SECTION V**PHYSICAL HAZARDS (REACTIVITY DATA)**

| | | |
|---|---|-----------|
| STABILITY: | Stable: Yes | Unstable: |
| CONDITIONS TO AVOID: | N/ A | |
| INCOMPATIBILITY, MATERIALS TO AVOID: | "Oxidizing agents (perchlorates, nitrates, nitrites, etc.) and high concentrations of mineral oil." | |
| HAZARDOUS DECOMPOSITION PRODUCTS: | Carbon Monoxide, Nitrogen Oxide, Carbon Dioxide and Nitric Acid possible in a fire. Ammonia and Hydrogen Cyanide under Extreme heat as in a fire. | |
| HAZARDOUS POLYMERIZATION: | Will not occur | |
| MAY OCCUR: | WILL NOT OCCUR: X | |

SECTION VI**HEALTH HAZARDS**

- A. EXPOSURE LIMITS:**
1. OSHA Permissible Exposure Limit (PEL): Not established
 2. Threshold Limit Value (TLV): Not established
- B. CARCINOGEN OR POTENTIAL CARCINOGEN:**
1. NPT: N/ A
 2. IARC: N/ A
 3. OSHA: N/ A
- C. EFFECTS OF OVEREXPOSURE:**
1. **ACUTE:**
EYES: May cause irritation. May cause permanent damage.
SKIN: May be irritating. Prolonged or repeated exposure may produce burns.
INHALATION: May be irritating to respiratory tract.
INGESTION: "Burning sensation in mouth, throat & esophagus. May produce nausea, abdominal pain, or diarrhea. May be fatal."
- D. EMERGENCY FIRST AID PROCEDURES:**
- EYES:** Immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention, preferably an ophthalmologist.
- SKIN:** Wash with soap and water. Rinse thoroughly; seek medical attention if inflammation occurs. Do not attempt to neutralize with chemicals.
- INHALATION:** Remove from exposure area. If irritation exists from mists, or in the event of massive inhalation, seek medical attention.
- INGESTION:** Give at least two glasses of water. DO NOT INDUCE VOMITING. Get medical attention.
- E. ANIMAL TOXICITY DATA:**
- Oral LD₅₀ (rat): 905 mg/ Kg
Inhalation LC₅₀ (rat): >21 mg/1/1H
Dermal LD₅₀ (rabbit): 500 – 1070 mg/ Kg
- F. ADDITIONAL INFORMATION:** To aid our customers in complying with regulatory requirements, SARA Title III hazard categories for this product are indicated in Section I. If the word "YES" appears next to any category, this product must be reportable by you under the requirements of 40 CFR Part 370. Please consult those regulations for details.

SECTION VII**SPECIAL PRECAUTIONS & SPILL/ LEAK PROCEDURES**

- HANDLING AND STORAGE:** Since emptied packages retain product residue, follow label warnings even after package is emptied.
- STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED:** Collect and contain for salvage or disposal. Absorb waste on inert media and dispose of as solid waste.
- WASTE DISPOSAL METHODS:** Landfill in compliance with all federal, state and local laws concerning health and environment.

SECTION VIII**SPECIAL PROTECTION / CONTROL MEASURES**

- RESPIRATORY PROTECTION:** As required by conditions. Use an OSHA or NIOSH approved respirator if required.
- VENTILATION:** General ventilation is usually adequate. Local exhaust should be used if needed for safe comfortable working conditions.
- WORK/ HYGIENIC PRACTICES:** N/ A

SECTION IX**ENVIRONMENTAL EFFECTS DATA**

To aid our customers in complying with regulatory requirements, SARA Title III hazard categories for this product are indicated in Section I. If the word "YES" appears next to any category, this product must be reportable by you under the requirements of 40 CFR Part 370. Please consult those regulations for details.

SECTION X**TRANSPORTATION DATA**

PROPER SHIPPING NAME: Liquid Boron

DOT HAZARD CLASS: N/ A

PLACARD: Non- hazardous, Non- regulated material.

IATA Proper Shipping Name: N/ A

IMO Proper Shipping Name: N/ A

Stoller Enterprises, Inc., believes the information contained in this material safety data sheet is accurate based on the information supplied by reputable suppliers of our raw materials. The information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers.