



STOLLER ENTERPRISES, INC.

4001 W Sam Houston Pkwy N, Suite 100 Houston, Texas 77043 U.S.A.
Toll-Free: 1-800-539-5283 Tel.: 713-461-1493 Fax: 713-461-4467

MP™ BORON

MATERIAL SAFETY DATA SHEET (rev.1/04)

SECTION I PRODUCT IDENTIFICATION

NFPA HAZARD RATINGS

HEALTH HAZARD 2 FIRE HAZARD 1 REACTIVITY 0

SARA/TITLE III HAZARD CATEGORIES (See Section IX)

Immediate (ACUTE) Health: none Delayed (Chronic) Health: none
Reactive Hazard: none Fire Hazard: none Sudden Release of Pressure: not applicable

Company Name: STOLLER ENTERPRISES, INC.
Address: 4001 West Sam Houston Pkwy N., Houston, Texas 77043 U.S.A.
Emergency Phone Number: CHEMTREC 1-800-424-9300
Phone Number for Information: 713-461-1493
Chemical Family: Borates.
Chemical Name & Synonyms: Liquid fertilizer containing boron.
Formula: See SECTION II COMPOSITION/INGREDIENTS INFORMATION
Trade name & Synonyms: **MP BORON (9% B)**

SECTION II COMPOSITION/INGREDIENTS INFORMATION

INGREDIENTS:	CAS #	Approx. %	TLV/TWA
Boric Acid	10043-35-3	50-55 %	N/E
Sodium Gluconate	527-07-1	7-10 %	N/E
Copper Chloride	10125-13-0	0.5-1%	1 mg/m ³ as Cu

SECTION III PHYSICAL AND CHEMICAL CHARACTERISTICS

BOILING POINT: 240°F (116°C) **VAPOR PRESSURE (mm/Hg):** <1mm @ 68°F (20°C)
MELTING POINT: N/A **VAPOR DENSITY (air = 1):** 2.1
SPECIFIC GRAVITY: 1.27 **REACTIVITY IN WATER:** N/A
SOLUBILITY IN WATER: 100% **EVAPORATION RATE:** <1
APPEARANCE AND ODOR: Clear blue, thick liquid, no odor.

SECTION IV FIRE AND EXPLOSION DATA

FLASH POINT: NOT ESTABLISHED
FLAMMABLE LIMITS: NOT ESTABLISHED **LEL:** **UEL:**
EXTINGUISHER MEDIA: Use all means suitable to fight surrounding fire.
SPECIAL FIRE FIGHTING PROCEDURES: NONE
UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

SECTION V PHYSICAL HAZARDS (REACTIVITY DATA)

STABILITY: Stable
CONDITIONS TO AVOID: Stable under normal conditions.
INCOMPATIBILITY, MATERIALS TO AVOID: Oxidizing agents and high concentrations of mineral acids.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide, Boric Oxide, Carbon Dioxide possible
in a fire. Borate and chlorate fumes under extreme heat as in a fire.
HAZARDOUS POLYMERIZATION: Will not occur.

SECTION VI HEALTH HAZARDS**A. EXPOSURE LIMITS**

OSHA Permissible Exposure Limit (PEL): Not Established

Threshold Limit Value (TLV): N/E

B. EFFECTS OF OVER EXPOSURE**1. ACUTE****EYES:** Contact with product may cause severe eye irritation and eye damage can occur.**SKIN:** Harmful if absorbed through broken skin. Large doses may cause liver damage and kidney damage. May cause discomfort, injury and death unless treated promptly.**INHALATION:** Prolonged exposure to low concentrations of vapors may cause temporary sore throat and headache**INGESTION:** May cause malaise, nausea, and even death.**2. CHRONIC:** Chronic test data are not known.**C. EMERGENCY FIRST AID PROCEDURES:****EYES:** Flush with water for at least 15 minutes. Get medical attention.**SKIN:** Wash thoroughly with soap and water.**INHALATION:** Move patient to fresh air. Supplemental oxygen may be indicated. Assure mucous does not obstruct airway. Call Physician.**INGESTION:** If swallowed, call a physician immediately. Remove stomach contents by gastric suction.**D. ADDITIONAL INFORMATION:** Acute Toxicity Effects Data:Oral LD₅₀ (rat): 905 mg/KgDermal LD₅₀ (rabbit): 500 - 1070 mg/KgInhalation LC₅₀ (rat): >21 mg/Lt/1Hr**SECTION VII SPECIAL PRECAUTIONS & SPILL/LEAK PROCEDURES****HANDLING AND STORAGE:** Keep containers closed and away from oxidizing agents. Store only in shipping container: Bulk material can be stored in Polyethylene Tanks with PVC fittings.**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED:** It is necessary to contain spill into the smallest area possible by diking, scooping, etc.; replace liquid into plastic container. If liquid is absorbed onto dry carrier such as soil or absorbent material, then this material should be put in covered labeled containers and dispose of as a dry waste.**WASTE DISPOSAL METHODS:** Follow all applicable federal, state and local regulations concerning liquid fertilizers.**SECTION VIII - SPECIAL PROTECTION / CONTROL MEASURES****RESPIRATORY PROTECTION:** Not specifically required.**VENTILATION:****LOCAL EXHAUST:** Provide general or local exhaust ventilation.**SPECIAL VENTILATION:** N/A**PROTECTIVE GLOVES:** Wear protective gloves and clothing impervious to this material.**EYE PROTECTION:** Use chemical goggles. Use full faceshield when there is any likelihood of splashes.**OTHER SPECIAL EQUIPMENT:** Eye wash fountain and safety shower should be located in immediate work area.**SECTION IX ENVIRONMENTAL EFFECTS DATA**

The available data on this plant nutrient material does not indicate any undue hazard to the environment under anticipated use and storage. Any waste due to spillage or leakage should be contained and disposed of as a Fertilizer not to exceed 3 lbs. of actual Boron per acre; high dosages of boron may be detrimental to some crops. See also above, Waste Disposal Methods. Due to its nutrient value, may contribute to eutrophication in bodies of water. May be toxic to fish.

SECTION X TRANSPORTATION DATA**PROPER SHIPPING NAME:**

RQ, Environmentally hazardous substances, liquid, NOS (Copper chloride, solution), 9, UN3082, III

DOT HAZARD CLASS: 9**PLACARD:** Miscellaneous (Also, Marine Pollutant if shipped by vessel)

Bill of Lading additional terminology:

"When spilling 450 lt (119 gal) driver must report the spill immediately to the National Response Center at 1-800-424-8802"

Note: Copper chloride solutions are severe marine pollutants as found on Appendix B of 49CFR 172.101, when shipped by vessel, all packages must bear a marine pollutant marking, and the container must be placarded.

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 determination 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.