



# STOLLER ENTERPRISES, INC.

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**MP™ SUPER STARTER**

**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: none

Company Name: STOLLER ENTERPRISES, INC.

Address: 4001 West Sam Houston Pkwy N, Suite 100, Houston, Texas 77043 U.S.A.

**Emergency Phone Number:                      CHEMTREC 1-800-424-9300**

Phone Number for Information:                      713-461-1493

Chemical Family: Metallic salts solution.

Chemical Name & Synonyms: micronutrient mixture, chelated copper, iron, manganese and zinc

Formula: See **SECTION II COMPOSITION/INGREDIENTS INFORMATION**

Trade name & Synonyms: **MP SUPER STARTER**

## SECTION II COMPOSITION/INGREDIENTS INFORMATION

INGREDIENTS:	CAS #	Approx. %	TWA
Copper Chloride	10125-13-0	2-4%	1 mg/m <sup>3</sup> as Cu
Ferrous Chloride	7758-94-3	4-5%	1 mg/m <sup>3</sup> as Fe
Manganese Chloride	7773-01-5	5-7%	1 mg/m <sup>3</sup> as Mn
Zinc Chloride	7646-85-7	9-14%	10 mg/m <sup>3</sup> (Zn Powder)
Sodium Gluconate	527-07-1	10-15	N/E

## SECTION III PHYSICAL AND CHEMICAL CHARACTERISTICS

<b>BOILING POINT:</b> 230 °F (110°C)	<b>VAPOR PRESSURE (mm/Hg):</b> <1mm @ 68 °F (20°C)
<b>MELTING POINT:</b> N/A	<b>VAPOR DENSITY (air = 1):</b> 2.1
<b>SPECIFIC GRAVITY:</b> 1.25	<b>REACTIVITY IN WATER:</b> N/A
<b>SOLUBILITY IN WATER:</b> 100%	<b>EVAPORATION RATE:</b> 0.1

**APPEARANCE AND ODOR:** dark blue - green solution, no odor.

## SECTION IV FIRE AND EXPLOSION DATA

**FLASH POINT:**                      NOT ESTABLISHED

**FLAMMABLE LIMITS:** NOT ESTABLISHED                      **LEL:**                      **UEL:**

**EXTINGUISHER MEDIA:** Product is non-flammable. Use any means suitable to fight surrounding fire.

**SPECIAL FIRE FIGHTING PROCEDURES:** NONE

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** NONE

## SECTION V PHYSICAL HAZARDS (REACTIVITY DATA)

<b>STABILITY:</b>	Stable
<b>CONDITIONS TO AVOID:</b>	Stable under normal conditions
<b>INCOMPATIBILITY, MATERIALS TO AVOID:</b>	Strong oxidizing agents
<b>HAZARDOUS DECOMPOSITION PRODUCTS:</b>	Carbon dioxide and other toxic fumes under fire conditions.
<b>HAZARDOUS POLYMERIZATION:</b>	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 irritation and possibly irreversible damage.

**SKIN:** Harmful if absorbed through broken skin. Large doses may cause liver and kidney damage. May cause, discomfort, irritation, injury and death unless treated promptly.

**INHALATION:** Prolonged exposure to low concentration of vapors may cause temporary sore throat and headache.

**INGESTION:** May cause malaise, nausea, gastrointestinal damage, or even death.

**2 CHRONIC:** Not known.**C. EMERGENCY FIRST AID PROCEDURES:**

**EYES:** Hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

**SKIN:** Remove product and immediately wash affected area with soap and water for 15 minutes. Do not apply greases or ointments. Launder contaminated clothing.

**INHALATION:** Move patient to fresh air. Supplemental oxygen may be indicated if patient has difficulty breathing.

Assure mucous does not obstruct airway. Call a physician if no improvement on patient condition.

**INGESTION:** If swallowed, call a physician immediately. Do not induce vomiting..

**D. ADDITIONAL INFORMATION: Note to physician: symptomatic treatment.****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, aluminum or stainless steel tanks.

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED:** It is necessary to contain spill into the smallest area possible by diking, enclosing, 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 regarding liquid fertilizers.

**SECTION VIII - SPECIAL PROTECTION / CONTROL MEASURES**

**RESPIRATORY PROTECTION:** Not specifically required. Use of a NIOSH/OSHA approved respirator is suggested.

**LOCAL EXHAUST:** Provide general or local exhaust ventilation.

**SPECIAL VENTILATION:** Not applicable

**PROTECTIVE GLOVES:** Wear protective gloves and clothing impervious to this material.

**EYE PROTECTION:** Use chemical goggles. Use face-shield protector when there is any likelihood of splashes.

**OTHER SPECIAL EQUIPMENT:** Eye wash fountain and safety shower should be located in immediate work area.

**WORK/HYGIENIC PRACTICES:**

**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 (see above under 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 (Zinc chloride and 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 1100 l (290 gal) driver must report the spill immediately to the National Response Center at 1-800-424-8802”

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.