

MICRO PLUS™ SuperStarter

Material Safety Data Sheet (rev.01/05)

SECTION I PRODUCT IDENTIFICATION

	NFPA HAZARD RATINGS
	HEALTH HAZARD 0 FIRE HAZARD 0 REACTIVITY 0
	SARA/ TITLE III HAZARD CATEGORIES (See Section IX)
	Immediate (ACUTE) Health: none Reactive Hazard: none
	Delayed (Chronic) Health: none Fire Hazard: none Sudden Release of Pressure: not applic
Company Name:	STOLLER USA, INC.
Address:	4001 West Sam Houston Pkwy N. Houston, Texas 77043
Emergency Phone Number:	CHEMTREC: In the U.S. and Canada, call toll-free: 1 (800) 424-9300 From all other countries, call collect: +1 (703) 527-3887
Phone Number for Information:	1 (713) 461-1493
Chemical Family:	metallic chlorides
Trade name & Synonyms:	MICRO PLUS SUPER STARTER

SECTION II PHYSICAL AND CHEMICAL CHARACTERISTICS

INGREDIENTS:	CAS#	Approx. %	TLV
Ferrous Chloride	10125-13-0	3	
Copper Chloride	7758-94-3	3	
Zinc Chloride	7646-85-7	10	
Manganese Chloride	7773-01-5	4	

SECTION III PHYSICAL AND CHEMICAL CHARACTERISTICS

BOILING POINT:	226° F	VAPOR PRESSURE (mm/ Hg):	
MELTING POINT:	N/ A	VAPOR DENSITY (air = 1):	2.1
SPECIFIC GRAVITY:	1.25	REACTIVITY IN WATER:	N/ A
SOLUBILITY IN WATER:	100%	EVAPORATION RATE:	0.1
APPEARANCE AND ODOR:	Clear blue solution, no odor.		

SECTION IV FIRE AND EXPLOSION DATA

FLASH POINT:	NOT ESTABLISHED	LEL:	UEL:
FLAMMABLE LIMITS:	NOT ESTABLISHED		
EXTINGUISHER MEDIA:	NONE SPECIFIC		
SPECIAL FIRE FIGHTING PROCEDURES:	Firefighters should wear self- contained breathing apparatus.		
UNUSUAL FIRE AND EXPLOSION HAZARDS:	Toxic fumes may evolve under fire conditions.		

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 acids.	
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon Monoxide, Nitrogen Oxide, Carbon Dioxide and Chlorinated vapors possible in a fire.	
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:**
- C. EFFECTS OF OVEREXPOSURE:**
1. **ACUTE:**
EYES: Prolonged exposure to product vapors may cause eye irritation and eye damage can occur.
SKIN: May cause malaise, discomfort, injury and death unless treated promptly.
INHALATION: Prolonged exposure to low concentrations of vapors may cause sore throat and headache which are temporary.
INGESTION: May cause malaise, nausea, death unless treated promptly.
- D. EMERGENCY FIRST AID PROCEDURES:**
EYES: Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Call a physician.
SKIN: Remove product & immediately flush affected area with water for 15 minutes do not apply greases or ointments. Launder contaminated clothing.
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.

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

- HANDLING AND STORAGE:** Keep containers closed and away from oxidizing agents. Store only in shipping container: Pails (PVC), Drums (Polyethylene) and Mini Bulk tanks (Polyethylene). Bulk material should 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, etc. Replace liquid into plastic container. If liquid is absorbed onto dry carrier such as soil or absorbent material, then this material should be held in a dry contained area.
- WASTE DISPOSAL METHODS:** NOT CONSIDERED A HAZARDOUS WASTE, EPA WASTE NUMBERS ARE NOT APPLICABLE, DISPOSAL BY CONTROLLED INCINERATION OR SECURE LANDFILL MAY BE ACCEPTABLE.

SECTION VIII**SPECIAL PROTECTION / CONTROL MEASURES**

- LOCAL EXHAUST:** Provide general or local exhaust ventilation.
- SPECIAL VENTILATION:** Work outdoors in the open or well ventilated area with this product.
- PROTECTIVE GLOVES:** Wear protective gloves and clothing impervious to this material.
- EYE PROTECTION:** Use chemical goggles. Use full- face shield when there is any likelihood of splashes.
- OTHER SPECIAL CLOTHING/ EQUIPMENT:** Eye wash fountain should be located in immediate work area.
- WORK/ HYGIENIC PRACTICES:** Wash thoroughly after handling. Also wash clothing.

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). If discharged into the marine environment it may be toxic to fish and other marine organisms. Due to its nutrient value, may contribute to eutrophication in bodies of water.

SECTION X**TRANSPORTATION DATA**

PROPER SHIPPING NAME: N/ A (Trade Name: MICRO PLUS SUPER STARTER)

DOT HAZARD CLASS: NON- HAZARDOUS

PLACARD: None

IATA Proper Shipping Name: N/ A

IMO Proper Shipping Name: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Contains Copper Chloride), 9, III, Marine Pollutant

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