

KEYLATE® MICROMIX

Material Safety Data Sheet (rev.01/05)

SECTION I PRODUCT IDENTIFICATION

	NFPA HAZARD RATINGS
	HEALTH HAZARD 1 FIRE HAZARD 0 REACTIVITY 0
	SARA/ TITLE III HAZARD CATEGORIES
	Immediate (ACUTE) Health: none Reactive Hazard: none
	Delayed (Chronic) Health: none Fire Hazard: none Sudden Release of Pressure: none
Company Name:	STOLLER USA, INC.
Address:	4001 W. Sam Houston Pkwy 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:	chelated metals
Chemical Name & Synonyms:	Chelated micronutrients
Formula:	See SECTION II COMPOSITION/ INGREDIENTS INFORMATION
Trade name & Synonyms:	KEYLATE® MICROMIX

SECTION II PHYSICAL AND CHEMICAL CHARACTERISTICS

INGREDIENTS:	CAS#	Approx. %	TLV
Zinc Oxide	1314-13-2	2-3%	5 mg/ m ³ as Zn
Manganese Oxide	1344-43-0	1-2	5 mg/ m ³ as Mn
Copper Chloride	7758-94-3	7-8	1 mg/ m ³ as Fe

SECTION III PHYSICAL AND CHEMICAL CHARACTERISTICS

BOILING POINT:	NOT ESTABLISHED	VAPOR PRESSURE (mm/Hg):	
MELTING POINT:	N/ A	VAPOR DENSITY (air = 1):	>1
SPECIFIC GRAVITY:	1.22	REACTIVITY IN WATER:	N/ A
SOLUBILITY IN WATER:	100%	EVAPORATION RATE:	0.1
APPEARANCE AND ODOR:	dark green- brownish solution, no odor.		
PERCENT VOLATILE BY VOLUME:			
pH:	N/ A		

SECTION IV FIRE AND EXPLOSION DATA

FLASH POINT:	NOT ESTABLISHED	LEL:	UEL:
FLAMMABLE LIMITS:	NOT ESTABLISHED		
EXTINGUISHER MEDIA:	Use extinguishing media appropriate to surrounding fire conditions.		
SPECIAL FIRE FIGHTING PROCEDURES:	Wear elf- contained breathing apparatus and protective clothing.		
UNUSUAL FIRE AND EXPLOSION HAZARDS:	May emit toxic fumes under fire conditions.		
AUTOIGNITION TEMPERATURE:	N/ A		

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

STABILITY:	Stable: Yes	Unstable:
CONDITIONS TO AVOID:	Stable under normal conditions.	
INCOMPATIBILITY, MATERIALS TO AVOID:	Not know. As a precaution, keep away from oxidizers.	
HAZARDOUS DECOMPOSITION PRODUCTS:	None	
HAZARDOUS POLYMERIZATION:	Will not occur	
MAY OCCUR:	WILL NOT OCCUR: X	

SECTION VI**HEALTH HAZARDS**

- A. EXPOSURE LIMITS:**
1. OSHA Permissible Exposure Limit (PEL): N/ E
 2. Threshold Limit Value (TLV): N/ E
- B. CARCINOGEN OR POTENTIAL CARCINOGEN:**
- C. EFFECTS OF OVEREXPOSURE:**
1. **ACUTE:**
EYES: May cause irritation, possible injury.
SKIN: May cause irritation, discomfort.
INHALATION: May cause irritation of nasal passages.
INGESTION: Irritation of mucous membranes in mouth, throat, nausea, diarrhea.
 2. **CHRONIC:** Pulmonary irritation. Severe irritation and inflammation of cut or abraded skin.
- D. EMERGENCY FIRST AID PROCEDURES:**
- EYES:** Rinse thoroughly with running water for 15 minutes. Seek medical attention.
- 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 help.
- INGESTION:** Drink excess water or milk. Induce vomiting. Seek medical attention.

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

- HANDLING AND STORAGE:**Keep containers closed and away from oxidizing agents. Store only in shipping container: Jugs (HDPE), Pails (HDPE,PVC), Drums (Polyethylene) and Mini Bulk tanks (Polyethylene).
- 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 sand or absorbent material, then this material should be held in a dry containment area.
- WASTE DISPOSAL METHODS:** Liquid should be applied to the soil as a fertilizer not to exceed 25 gallons per acre. Product absorbed onto dry carrier should be applied to soil as a fertilizer no to exceed 600 lbs, per acre. Follow all applicable federal, state and local laws and regulations concerning health and environment.

SECTION VIII**SPECIAL PROTECTION / CONTROL MEASURES**

- RESPIRATORY PROTECTION:** As required by conditions. Use and OSHA or NIOSH approved respirator if necessary.
- VENTILATION:** General ventilation is usually adequate. Local exhaust should be used if needed for safe, comfortable working conditions.
- SPECIAL VENTILATION:** Working outdoors in the open or well ventilated area with this product is suggested.
- PROTECTIVE GLOVES:** Use butyl rubber gloves or of any other impervious material.
- EYE PROTECTION:** Use splash proof eye goggles. In emergency situations it is best to wear a full faceshield.
- OTHER SPECIAL CLOTHING/ EQUIPMENT:** Wear clothing that covers as much skin as possible.
- WORK/ HYGIENIC PRACTICES:** Wash thoroughly after handling. Also wash clothing. Eye wash should be available.

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 copper content, may be toxic to fish. 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 may 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: Not Applicable (Trade Name: KEYLATE® MICROMIX)

DOT HAZARD CLASS: Non- Hazardous Material; Non- Regulated Material

PLACARD: N/ A

USDOT Proper Shipping Name: N/ A

IATA Proper Shipping Name: N/ A

IMO Proper Shipping Name: N/ A

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