

HELP

Material Safety Data Sheet (rev.01/05)

SECTION I PRODUCT IDENTIFICATION

	NFPA HAZARD RATINGS
	HEALTH HAZARD 3 FIRE HAZARD 1 REACTIVITY 0
	SARA/ TITLE III HAZARD CATEGORIES (See Section IX)
	Immediate (ACUTE) Health: NO Reactive Hazard: NO
	Delayed (Chronic) Health: NO Fire Hazard: No Sudden Release of Pressure: N/ A
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 USA and Canada call toll- free: 1 (800) 424-9300 From all 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 micronutrient solution
Formula:	Proprietary
Trade name & Synonyms:	REZIST

SECTION II PHYSICAL AND CHEMICAL CHARACTERISTICS

INGREDIENTS:	CAS#	Approx. %	TLV
Zinc Oxide	1314-13-2	< 5	10 mg/ m ³ (ZnO dust).
Manganese Oxide	1344-43-0	< 5	5 mg/ m ³ (MnO dust).
Tri- Basic Copper Sulfate	1332-34-5	< 5	1 mg/ m ³ as Cu

SECTION III PHYSICAL AND CHEMICAL CHARACTERISTICS

BOILING POINT:	212°F	VAPOR PRESSURE (mm/ Hg):	
MELTING POINT:	N/ A	VAPOR DENSITY (air = 1):	2.1
SPECIFIC GRAVITY:	1.22	REACTIVITY IN WATER:	
SOLUBILITY IN WATER:	100%	EVAPORATION RATE:	10%
APPEARANCE AND ODOR:	clear dark blue solution, slight pleasant odor.		
PERCENT VOLATILE BY VOLUME:			N/ A

SECTION IV FIRE AND EXPLOSION DATA

FLASH POINT:	Not Established		
FLAMMABLE LIMITS:	Not Established	LEL: NOT ESTABLISHED	UEL: NOT ESTABLISHED
EXTINGUISHER MEDIA:	N/ A		
SPECIAL FIRE FIGHTING PROCEDURES:	NONE		
UNUSUAL FIRE AND EXPLOSION HAZARDS:	NONE		

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

STABILITY:
CONDITIONS TO AVOID:
INCOMPATIBILITY, MATERIALS TO AVOID:
HAZARDOUS DECOMPOSITION PRODUCTS:
MAY OCCUR: **WILL NOT OCCUR: X**

Stable: Yes Unstable:
Stable under normal conditions.
Intimate mixtures with chlorinated rubber above 216°F.
Ammonia, amines, carbon dioxide.

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: 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, 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, gastrointestinal damage, or even death.
2. **CHRONIC:** Prolonged or repeated inhalation overexposure may cause bronchitis or pneumonia.
- D. 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 & 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. Do not induce vomiting.
- E. ANIMAL TOXICITY DATA:**N/ A
Oral LD₅₀ (rat): 3027 mg/ Kg
Inhalation LC₅₀ (rat):>2.31 mg/ Lt
Dermal LD₅₀ (rabbit):>5050 mg/ Kg
Toxicity Data: Primary eye irritation rabbit: No irritation recorded, Toxicity Category IV
Primary dermal irritation rabbit: No irritation in test, Toxicity Category IV

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

HANDLING AND STORAGE:Keep containers tightly closed. Store away from food, feed and clothing, in dry area, above freezing and below 100°F

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED: Prevent material from entering sewers or waterways. Recover as much as possible by scooping, then use an absorbent inert to capture residues and dispose of as a solid waste.

WASTE DISPOSAL METHODS: Follow all applicable federal, state and local regulations.

SECTION VIII**SPECIAL PROTECTION / CONTROL MEASURES**

RESPIRATORY PROTECTION: Wear a NIOSH / OSHA approved respirator if working conditions require to do so.

VENTILATION: Not necessary if working in open spaces or normally well- ventilated area.

LOCAL EXHAUST: Provide general or local exhaust ventilation.

PROTECTIVE GLOVES: Wear protective clothing impervious to this material.

EYE PROTECTION: Use chemical goggles. Use full- face respirator when there is any likelihood of splashes.

WORK/ HYGIENIC PRACTICES: Wash hands thoroughly after handling this product.

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 may be reportable by you under the requirements of 40 CFR Part 370. Please consult those regulations for details. 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 harmful to fish.

SECTION X**TRANSPORTATION DATA**

DOT HAZARD CLASS: NON- REGULATED MATERIAL

PLACARD: N/ A

USDOT Proper Shipping Name: NOT APPLICABLE

IATA Proper Shipping Name: N/ A

IMO Proper Shipping Name: N/ A

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