SA-50^R CHELATED GENERAL PURPOSE MINOR ELEMENT SPRAY

MATERIAL SAFETY DATA SHEET

MS0193

Manufacturer's Name & Address

Southern Agricultural Insecticides, Inc. Office Phone: 941-722-3285 PO Box 218, Palmetto, Fla. 34220 Chemtrec: 1-800-424-9300

I. NOMENCLATURE

SA-50 Chelated General Purpose Minor Element Spray Product Name:

Chemical Name: Magnesium, manganese, copper, zinc and iron lignosulfonate complexes

Chelated minor elements Synonyms: lignosulfonate metal chelates Chemical Family:

II INGREDIENTS

Metals in this mixture are combined as lignosulfonate complexes and sulfates.

CAS numbers are given for sulfates.

Magnesium as Mg from Magnesium sulfate 0.51% CAS No. 7487-88-9 OSHA limit not established Manganese as Mn from MnSO₄ Ceiling value as Mn 5 mg/m³ 1.00% CAS No. 7785-87-7 Copper as Cu from CuSO₄ 0.24% CAS No. 7758-98-7 TWA as Cu (mist) 1 mg/m³ Zinc as Zn from ZnSO₄ OSHA limit not established 0.50% CAS No. 7733-02-0 Iron as Fe from FeSO₄ 2.75% CAS No. 7782-63-0 TWA as Fe 1 mg/m₃ >1.00% CAS No. 7664-93-9 TWA 1 mg/m³ Sulfuric Acid

OSHA limit not established Sodium lignosulfonate 5.4% CAS No. 8061-51-6

IARC no OSHA no Carcinogen or potential carcinogen components listed NTP no

III PHYSICAL PROPERTIES

Boiling Point: >212°F. Specific Gravity: 1.203.

Vapor Pressure: (mmHg)760@100°C Percent Volatile: (by volume)>70%

Vapor density: (air=1) NA Evaporation Rate: Water

Solubility In Water: Soluble Reactivity in Water: Nil, water base, acidic

Appearance/Odor: Dark brown liquid with musty odor. Product pH approximately 4

IV FIRE AND EXPLOSION DATA

Flash Point: Does not flash Flammable Limits: Lel N/A Uel N/A Extinguishing Media: Water base does not support combustion. Use water spray to cool containers.

Special Fire Fighting Procedures: If heated to decomposition fight fire upwind and wear self contained breathing apparatus

and protective clothing.

Unusual Fire & Explosion Hazards: May emit toxic smoke and vapors if heated to decomposition.

V FIRST AID

First Aid for EYE Exposure: Flush eyes for 15 minutes with gentle stream of water, lift upper and lower lids occasionally while flushing. Get medical attention.

First Aid for SKIN Exposure: Remove contaminated clothing and wash all exposed skin surfaces thoroughly with soap and water. If irritation develops, see a physician.

First Aid for INHALATION: Remove from exposure. If irritation develops, see a physician.

First aid if SWALLOWED: If victim is conscious, immediately give 2 glasses of water and induce vomiting. Followed by bicarbonate of soda in water. Never give anything by mouth to an unconscious or convulsing person. Get immediate medical assistance.

SYMPTOMS of OVEREXPOSURE: Eye irritation, respiratory difficulties, nausea and vomiting and dermal allergic response.

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VI REACTIVITY

Stability: Stable under normal storage conditions.

Conditions to Avoid: Intense heat.

Materials to Avoid: Avoid contact with strong oxidizing agents. Avoid contact with copper and aluminum. Water rinse sprayers after using.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, metallic oxides, oxides of sulfur.

Hazardous Polymerization: Does not Occur

VII SPILL OR LEAK PROTECTION

Steps To Be Taken If Spilled: If possible, recover and use according to label instructions. Otherwise dike and absorb spill. Shovel into an approved waste container. Wash impervious surfaces with mild caustic soda solution then wash with soap and water.

Waste Disposal; Dispose of in accordance with local, State, and Federal regulations.

VIII SPECIAL PROTECTION

Respiratory: Type/Conditions: Where spray mist exposure would occur and/or where exposure limits would be exceeded wear a NIOSH approved respirator with pesticide cartridge.

Ventilation: When application would be made in confined area local exhaust ventilation with mist collection.

Gloves: Rubber gloves if contact with material is unavoidable.

Eye Protection: Safety glasses with side shields or goggles.

Other Protective Equipment: Freshly laundered, body covering work clothing. Do not wear contaminated clothing.

IX SPECIAL PRECAUTIONS

Note: When this product is used in combination with pesticides, the safety precautions for those pesticides must also be followed.

Handling Precautions: Avoid personal contact. Avoid breathing spray mist. Avoid container damage. Do not put leaking or damaged containers in storage.

Storing Precautions: Store in cool well ventilated area away from feed and food. Avoid areas of extreme heat. Do not store near strong oxidizing agents. KEEP OUT OF REACH OF CHILDREN.

Other Precautions: Do not contaminate waters by cleaning equipment or disposal of waste.

X TRANSPORTATION

Packing sizes of 55 gal or less not regulated.

Container sizes of 100 gal or larger RQ Corrosive liquid, acidic, inorganic, n.o.s. (Cupric sulfate) UN 3264 PG III Freight class: Manufactured fertilizer compounds, liquid NOI, NMFC 68140 sub 6

This information relates solely to the designated product and is not inclusive for combinations with other materials. This information is given without warranty or representation. Information is based on data we believe to be correct as of the date hereof. This information is furnished solely for your consideration, investigation, and verification. Before using any product READ THE LABEL.

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