

**Manufacturer's Name & Address**

Southern Agricultural Insecticides, Inc.  
P.O. Box 218, Palmetto, Fla. 33561

Phone: 1-941-722-3285  
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**I NOMENCLATURE**

**Product Name:** PALM NUTRITIONAL  
**Chemical Name:** Magnesium, manganese, and iron lignosulfonate complexes  
**Synonyms:** Chelated minor element  
**Chemical Family:** lignosulfonate metal chelate

**II INGREDIENTS**

Metals exist in this mixture as lignosulfonate complexes and uncombined sulfates.

CAS numbers are given for sulfates.

Manganese as Mn from $\text{MnSO}_4$	2.50%	CAS No. 7785-87-7	TLV (mist as Mn) 5 mg/m <sup>3</sup>
Magnesium as Mg from $\text{MgSO}_4$	1.50%	CAS No. NA	TLV Not established
Iron as Fe from $\text{FeSO}_4$	1.00%	CAS No. 7782-63-0	TLV (mist as Fe) 1 mg/m <sup>3</sup>
Sulfuric Acid	>1.00%	CAS No. 7664-93-9	TLV (mist) 1 mg/m <sup>3</sup>

Product pH approximately 4

Carcinogen or potential carcinogen. Sodium lignosulfonate, Ferrous Sulfate, and Sulfuric Acid.

NTP: no IARC: no

**III PHYSICAL PROPERTIES**

**Boiling Point:** >212°F.

**Vapor Pressure:** (mmHg) 760@100°C

**Vapor density:** (air=1) >4

**Solubility In Water:** Soluble

**Appearance/Odor:** Dark brown liquid with musty odor.

**Specific Gravity:** 1.2

**Percent Volatile:** (by volume) >75%

**Evaporation Rate:** Water

**Reactivity in Water:** Nil, water base

**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.

**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 plenty of water, lifting 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, induce vomiting followed by bicarbonate of soda in water. Get immediate medical assistance.

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

**VI REACTIVITY**

**Stability:** Stable under normal storage conditions.

**Conditions to Avoid:** Intense heat.

**Materials to Avoid:** Avoid contact with strong oxidizing agents.

**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 soap and water.

**Waste Disposal:** Dig residue into soil if outdoors and spill is small, otherwise 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 TLV 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**

**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.

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.