

HYDROPONIC FERTILIZER 4-18-38 MATERIAL SAFETY DATA SHEET

Manufacturer's Name & Address
Southern Agricultural Insecticides, Inc.
PO Box 218, Palmetto, Fla. 34220

Phone: 941-722-3285
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I NOMENCLATURE

Product Names: Hydroponic Fertilizer 4-18-38
Chemical Name: Not applicable (mixture of fertilizer materials)

II INGREDIENTS

| | CAS # | EXPOSURE LIMITS | DOT Hazard |
|--|------------|----------------------------------|----------------------|
| Potassium nitrate (KNO ₃) | 7757-79-1 | OSHA Not established | Oxidizer |
| Mono ammonium phosphate (MAP) | 7727-76-1 | Not established | None |
| Mono potassium phosphate (MKP) | 7778-77-0 | Not established | None |
| Sulfate of Potash (K ₂ SO ₄) | 7778-80-5 | Not established | None |
| Ferric sodium DTPA | 12389-75-2 | TWA (Fe) 1mg/M ³ | Corosive to Aluminum |
| Manganese sulfate | 10034-96-5 | Ceiling (Mn) 5 mg/M ³ | none |
| Zinc disodium EDTA | 14025-21-9 | None | Corosive to Aluminum |
| Copper sulfate | 7758-99-8 | TWA (Cu dust) 1mg/M ³ | Class 9, RQ 10 lb |
| Boric acid | 10043-35-3 | Not established | None |
| Sodium molybdate | 7631-95-0 | TWA (Mo) 5 mg/M ³ | None |
| Disodium Octaborate Tetrahydrate | 12008-41-2 | None | None |
| Product subject to dust exposure limits "PNOR" OSHA (respirable) TWA 5 mg/M ³ (total dust) TWA 15 mg/M ³ ACGIH 10 mg/M ³ | | | |

III PHYSICAL PROPERTIES (ND=Not determined, NA=Not applicable)

Boiling Point: decomposes on heating Bulk Density: approx. 50 lb/ft³
Vapor pressure: (mmHg) NA Percent Volatile: (by volume) NA
Vapor Density: (air=1) NA Evaporation Rate: NA
Solubility In Water: Soluble Reactivity in Water: Negligible, (acidic)
Appearance/Odor: Light blue, fine crystalline powder, practically no odor

IV FIRE AND EXPLOSION DATA

Flash Point: ND decomposes on heating Flammable Limits: N/D

Extinguishing Media: Use water spray to cool material.

Product contains oxidizers which can provide oxygen to support fire and cause some combustible materials to ignite explosively.

Special Fire Fighting Procedures: If it can be done without risk, remove material from fire area and spread containers to cool. Personnel should remain upwind. Firemen should wear self contained breathing apparatus (air-pac) and full protective clothing...

Unusual Fire Explosion Hazards: Under fire conditions, toxic fumes may be evolved. Do not breathe smoke or vapors generated. Keep dust to a minimum. The presence of powerful oxidizing agents will increase intensity of existing fires and the possibility of an explosion exists.

V FIRST AID

EYE Exposure: Flush eyes with gentle stream of clean water for 15-30 minutes, lifting upper and lower lids occasionally while flushing. Get medical attention if irritation occurs.

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

INGESTION:: If person is conscious give large amount of water. Induce vomiting unless medical attention is immediately available. Get immediate medical attention. Do not give anything by mouth to an unconscious or convulsing person.

INHALATION: Remove to fresh air. If effects occur, consult physician immediately.

SYMPTOMS of OVEREXPOSURE: May irritate eyes, nose, throat and skin.

Ingestion of large quantities can cause nitrate poisoning.

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VI HEALTH HAZARD DATA

Carcinogenicity: IARC-NO NTP-NO OSHA-NO None known within 0.1% reporting levels.
Routes of entry: Inhalation: irritating Skin: Not expected to be hazardous Ingestion: Low toxicity. Ingestion of large amounts may cause nitrate poisoning; dizziness abdominal cramps, bloody diarrhea, weakness, convulsions and collapse.

VII REACTIVITY

Stability: Stable under normal use and storage conditions.
Conditions to avoid: Heat and ignition sources,
Materials to Avoid: Oxidizing agents, organic materials, particularly oils, and other flammable or combustible materials, strong alkali, reducing agents, chlorine bleaches.
Hazardous Decomposition Products: Decomposes under fire conditions to release ammonia oxides of nitrogen, phosphorus, potassium, carbon, cyanuric acid and biuret.
Hazardous Polymerization: Will not occur.

VIII SPILL OR LEAK PROTECTION

Steps To Be Taken If Spilled: Sweep up and shovel into secure labeled container for disposal or use. Avoid unnecessary dust.
Waste Disposal: Residue that can not be used as fertilizer should be disposed of according to local, State, and Federal regulations.

IX SPECIAL PROTECTION

Note: When this product is used in combination with pesticides, the safety precautions for those pesticides must also be followed.
Respiratory: Type/Conditions: Not normally needed under use conditions. Where adequate ventilation is not available, or where exposure limits would be exceeded, wear a NIOSH approved dust respirator.
Ventilation: Product is intended for use outdoors. If used indoors, use local exhaust ventilation to minimize dust exposure.
Gloves: Not normally needed. If for prolonged or repeated use, wear clean impervious gloves to minimize exposure.
Eye Protection: Safety glasses with side shields or chemical goggles.
Other protective equipment: Clean, freshly laundered, body covering work clothing daily. Washing facility and eyewash station should be available.

X SPECIAL PRECAUTIONS

Handling Precautions: Avoid personal contact with product. Wash thoroughly after use. Do not wear contaminated clothing.
Storing Precautions: Do not place leaking or damaged containers into storage. Store in cool, dry, well ventilated area away from excessive heat and ignition sources. Do not store with indicated "Materials to avoid" see section VII. Do not store on oil contaminated floors. When storing leave air space between adjacent stacks and adjacent building walls.
Other Precautions: KEEP OUT OF REACH OF CHILDREN and domestic animals. Do not contaminate any body of water by cleaning equipment or disposal of waste.

XI TRANSPORTATION:

Not regulated by DOT
Freight class Manufactured fertilizer compounds, N.O.I., NMFC 68140 sub 5

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.