

Material Safety Data Sheet

Section 1 - Chemical Product and Company Identification

Manufacturer's Name: FLORIKAN ESA
1579 Barber Rd.
Sarasota, FL 34240
Phone Number: (941) 377-8666
Emergency Phone: (800) 424-9300 Chemtrec USA
(703) 527-3887 Chemtrec Int'l
Effective Date: June 26, 2006
Revised Date(s): N/A

Section 2 - Composition/Information of Hazardous Ingredients

Product Trade Name: 18-6-12 Fertilizer Mixture
Common Chemical Name: Inorganic Chemical Fertilizer Mixture
N-P-K (Nitrogen-Phosphorus-Potassium): Mixed by dry blended fertilizers
No hazardous ingredient exceeds 1% of total mixture.
Non-hazardous Composition: 2%-30% - Total Nitrogen as N
4%-25% - Total Phosphorus as P2O5
6%-15% - Total Potassium
Balance — Micro ingredients (Zn, Mn, Fe, Cu) fertilizer
Salts, inert ingredients trace impurities
(Note: See product tag or label for specific ingredients)

TLV = 10 mg/m nuisance dust

DOT/IATA Description: Non-regulated chemicals, N.O.S.

Section 3 - Hazards Identification/Emergency Overview (as defined by OSHA Hazard Communication Standard, 29 CFR 191 0.1200) Appearance and Odor: White to off-white, light granular powders with a fertilizer-like odor.

Statements of Health Hazards: Avoid contact with eyes and skin. Do not breathe concentrated dusts. May cause eye, nose, throat and skin irritation. (particularly in sensitive persons) and is irritating to the upper respiratory tract expected from unprotected breathing of fertilizer dust. Avoid prolonged or repeated skin contact. Eye protection and rubber gloves should be used when handling this material. Since children could ingest toxic doses of fertilizers, these products should be stored in a secure place and keep containers tightly closed. Do not puncture, drop or slide.

These blended dry fertilizers are typically mixtures of potassium, phosphates, chlorides nitrates, sulfur, sulfates, urea, and micro-ingredient range quantities of metal salts such as iron, manganese, copper and zinc. A review of the ingredient salts indicates that ingestion may cause diarrhea, purging, and flatulence. Nausea and vomiting could be expected upon large dose ingestion. The acute effects of ingestion are described as nausea, chills and diarrhea. **Keep out of reach of children!** In case of exposure, **see First Aid in Section 7.** Wash thoroughly with plenty of soap and water after use. **NOTE:** the full chemical and toxicological characteristics of this material have not been fully investigated. Good laboratory practice should be practiced and followed when using this chemical. For airborne particulates, the OSHA P.E.L. (for inert or nuisance dust) is 15 mg/m³ total dust, 5 mg/m³ respirable (29 CFR 1910.1,000 Table Z-3). For ACGIH, the T.L.V. is 10 and 5 mg/m³ respectively.

***** **Read the entire MSDS for a more thorough evaluation of the hazards.**

LEGEND

N/A NOT APPLICABLE/AVAILABLE

N/I NO INFORMATION WAS FOUND

N/D = () DATA/NOT DETER

N/E=NQT ESTABLISHED

Section 4 - Physical and Chemical Properties

Boiling Point (°F/C): N/A

Freezing Point: (°F): N/A

Percent Volatile by weight: (%) N/A

Melting Point: N/A

Vapor Pressure (mmHg@ 20°C): None

Vapor Density (Air=1): N/A

Solubility in H₂O: Appreciable

Solubility, organic solvents: N/D

Appearance: Grey, brown, and light colored granular powders

Odor: Fertilizer-like odor

Molecular/Formula Weight: N/D

Specific Gravity (H₂O+1): >1

Section 5 - Fire Fighting Measures

Flammable Properties: Not flammable

Flash Point(C°): Not flammable

Auto-ignition: Not applicable

Flammable Limits: Not applicable

(% by Vol.) LEL UEL:

Extinguish Media and Fire Fighting Instructions: Not considered combustible

Use water fog, chemical foam, 002, and dry chemical powder.

Wear adequate protective (heat resistant) clothes and self-contained breathing apparatus to avoid exposure to the toxic vapors and decomposition products.

Immediately remove flammable material from source of fire.

Special Firefighting Procedures

Evacuate area and fight fire from a safe distance. Use media proper to the primary cause of fire. Firefighters should wear normal firefighting equipment and procedures.

Unusual Fire and Explosion Hazards

This particular product dLuj% However, Urea may decompose in a fire situation and release cyanuric acid, ammonia, hydrogen cyanide, oxides of nitrogen, and irritating particulates. Sulfur-containing components may release oxides of sulfur.

NFPA Hazards Rating

Health = 1	0-Least
Flammability = 0	1-Slight
Reactivity = 0	2-Moderate
	3-High
	4-Severe

LEGEND 2

N/A NOT APPLICABLE/AVAILABLE
N/I = NO INFOR \ AS FOUND
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Section 6 — Carcinogen Status

Chemical Listed as Carcinogen or Potential Carcinogens

National Toxicology Program: (components present at 0.1% or more)

Yes ___ IARC? Yes ___ NTP Yes ___ ACGIH Yes ___ OSHA

No ___ No ___ No ___ No ___

Section 7- First Aid Procedures.. (not to be construed as a medical recommendation)

Inhalation: When it is safe to move into the area, remove from exposure. Remove to fresh air. Use a bag valve mask or similar device to perform artificial respiration (rescue breathing). If breathing is difficult, give oxygen. Seek immediate medical attention.

Eyes: In cases of contact with this material, wash eyes with water or natural saline solution. Remove contact lenses if worn. IMMEDIATELY rinse with plenty of water for a prolonged period, whilst keeping the eyes wide open (for at least 15 minutes). Consult an eye specialist immediately.

Skin: Remove contaminated clothing, jewelry, and shoes immediately. Rinse skin with plenty of Soap and large amounts of water, until no evidence of chemical remains (For at least 15—20 minutes). For burns, cover affected area securely with sterile, dry loose fitting dressing. Get immediate medical attention.

Ingestion: Dilute with water or milk. If necessary, induce vomiting only if victim is conscious. Contact a physician immediately.

Warning! NEVER give an unconscious or convulsing person anything to drink, or induce vomiting. When vomiting occurs, keep head lower than hips to help prevent aspiration. If person is unconscious, turn head to side. Call a doctor immediately.

Notes to Physician: Provide general supportive measures and treat symptomatically. In cases of ingestion, the decision of whether or not to induce vomiting should be made by the attending physician, If burn present, treat as a thermal burn. Removing adhered product from burned skin may compromise the skin integrity and result in infection and/or more severe scarring.

******* victims of chemical over-exposure are taken for medical attention, give a copy of the label or MSDS to the physician/health care professional.**

Section 8 - Stability & Reactivity Data

Chemical Stability: (X) Stable () Unstable

Conditions to avoid: () None known () Combustible materials () Dusting conditions

(X) Moisture (X) Excessive heat, Open flames or sparks

Incompatibility: () None known () Water () Acids (X) Strong Bases () Corrosives
(X) Oxidizers () Other: Incompatible Material

Hazardous Polymerization: () May (X) Will not occur () Occur

Hazardous Decomposition or Byproducts: Urea may decompose to release cyanuric acid, ammonia, HCN, and NO.

Section 9 - Accidental Release Measures

Steps to be taken in case material is released or spilled.

For Small spills.... Clean up and contain spills with absorbent material. Evacuate personnel not essential to the clean up. Avoid contact with skin and eyes. This material is an irritant to the eyes(mucus membranes), skin, nose, throat and upper respiratory tract. Wear safety goggles and rubber chemical resistant gloves. Extinguish all sources of ignition and ensure that all handling equipment is grounded. Carefully sweep up and place in an appropriate DOT approved waste disposal container. Keep material out of sewers, storm drains, surface waters and soil. ******Important Note:** When exposure level is not known, wear NIOSH/MSHA approved, positive pressure, self-contained vapor respirator. Where exposure level is known, wear same protective clothing/equipment as in **Section 10.**

Waste Disposal Method.... Disposal must be made in accordance with all State, Federal Laws, and Local and environmental control regulations for non-hazardous waste. Do not let runoff into drains, sewers, and other waterways.

Section 10 - Exposure Controls/Personal Protection(PPE)

Consult your Safety Officer and/or Chemical Hygiene Officers

Respiratory Protection: Avoid breathing fertilizer dusts. Use a NIOSH/MSHA approved particulate respirator if respirable dust generation occurs or is anticipated during product use. Use other protective equipment (goggles, gloves, etc.) as required by conditions of product use. **Observe OSHA Standard 29 CFR 1910.134.**

Ventilation: Use adequate with ventilation. Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Ensure compliance with applicable exposure limits. Refer to OSHA Standard CFR 29 1910.94.

Eye Protection: Wear splash glasses or goggles with face shield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin and Body Protection: Avoid prolonged or repeated contact may irritate skin. Protective clothing to prevent skin contact. Wash thoroughly after handling. Provide eyewash fountain and safety shower should be readily available to points of potential exposure.

Gloves: Rubber chemical resistant gloves.

Work/Hygienic Practices: Food beverages and tobacco products should not be carried, stored, or consumed where this material is in use. Before eating drinking, or smoking, wash face and hands thoroughly with soap and water. Avoid contact with skin, eyes and clothing. Avoid breathing vapors/mists. Use only with adequate ventilation. Provide eyewash fountain and safety shower should be readily available to points of potential exposure.

Section 11 - Cautionary statements for persons handling this material:

- **May be harmful if swallowed in quantity.**
- **Fertilizer dusts may irritate the eyes and respiratory system.**
- **Prolonged product contact may irritate sensitive skin.**
- **Wash thoroughly after handling.**
- **Keep fertilizers out of the reach of children.**

NOTE: These products are fertilizers. Do not eat them and avoid breathing their dusts.

Section 12 - Handling and Storage

Handling: Avoid breathing fertilizer dusts. Work in a well-ventilated or extracted area. Wash thoroughly after handling. Avoid prolonged skin and eye contact. Material is irritating to the mucus membranes and upper respiratory tract. Wear suitable eye protection, chemical resistant rubber type gloves, and protective clothing. Keep containers tightly closed. Do not puncture, drop or slide. **Keep out of reach of children!**
In case of exposure, see First Aid in Section 7.

Storage: Keep away from excessive heat and ignition sources. Keep away from eyes, skin or clothing, wash thoroughly after handling. Keep containers tightly closed and in a dry and well-ventilated place. Store large quantities in buildings designed to comply with OSHA 29 CFR 1910.106.

Section 13 — DOT Transportation Information

Irritant —non-regulated, N. O. S.

Section 14— Regulatory Information

SARA Title III Hazard Category: Immediate	N
Sudden Release	N
Fire	N
Delayed	N
Reactive	N

Substances Regulated Under SARA Title III, Sec, 313: None listed

Section 15 - State Regulations:

California Proposition 65: No

Section 16- Other Information:

HMIS Rating Code:	O=Minimal; 1=Slight;
HEALTH: 1	2=Moderate; 3= Serious;
FLAMMABILITY: 0	4=Severe;(*)=Chronic Health
REACTIVITY: 0	
PPE: E	

References: HMIS Implementation Manual, Edition II, NIOSH, RTECS, IMDG code Manual, ARC, ACGIH TLVs and BEIs, The Seventh Annual Report on carcinogens. EPA The Emergency Planning and Community Right-to-know Act (Section 313 Release Reporting Requirements).

DISCLAIMER

THE INFORMATION CONTAINED HERE IN IS BASED ON OUR EXPERIENCE AND TECHNICAL DATA, CONSIDERING THERE ARE MANY FACTORS BEYOND OUR KNOWLEDGE AND CONTROL, FLORIKAN ESA CORPORATION, CANNOT ACCEPT LIABILITY FOR ANY LOSS, INJURY OR DAMAGE RESULTING FROM RELIANCE UPON SUCH INFORMATION. FURTHERMORE, LEAD, MERCURY, CADMIUM, AND HEXAVALENT CHROMIUM HAVE NOT BEEN INTENTIONALLY INTRODUCED AS AN ELEMENT DURING MANUFACTURE OR DISTRIBUTION TO THE PRODUCT, PACKAGING OR PACKAGING COMPONENTS. THIS MATERIAL SAFETY DATA SHEET WAS PREPARED TO COMPLY WITH THE OSHA HAZARD COMMUNICATIONS STANDARD (29 CFR 1910.1200) THIS SUPERSEDES ANY PREVIOUS INFORMATION.

LEGEND 5
N/A NOT APPLICABLE/AVAILABLE
Nil — NO INFORMATION WAS FOUND
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N/F—NOT ESTABLISHED