

Material Safety Data Sheet

Product: **Dyna Flo Liquid Fertilizers**

May be used to comply with OSHA's Hazard Communication Standard 29CFR 1910. Standard must be consulted for specific requirements.

QUICK IDENTIFIER

Common Name: All Dyna Flo Liquid Fertilizers
all fertilizer N-P-K liquid blends

SECTION 1 - COMPANY INFORMATION

Manufacturer's Name: Chemical Dynamics, Inc. Emergency Telephone Number: 1-800-424-9300
Address: 4206 Business Lane Other Information Call: 1-813-752-4950
City, State, and Zip Plant City, Florida 33566 Date Prepared: 3/12/04

SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY

Hazardous Component(s) (chemical & common name(s))	OSHA PEL	ACGIH TLV	EXPOSURE LIMITS	CAS NO.
Ammonium Calcium Nitrate CaNO3	N/A	N/A		15245-12-2
Phosphoric Acid H2PO4	N/A	N/A		7664-38-2
Potassium Nitrate KNO3	N/A	N/A		7757-79-1
Urea Ammonium Nitrate U-32	N/A	N/A	6484-52-2 and 57-13-6	

May contain 0-50% Nitrates, which are classified as Oxidizers when pure.
Mixed Fertilizer solutions are generally considered to be non-hazardous.

SECTION 3- PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point: >212 F Specific Gravity: 1.23-1.45 Vapor Pressure: N/A

Vapor Pressure: N/A Reactivity in Water: Soluble Melting Point: N/A

Appearance and Odor: Clear to honey colored solutions

SECTION 4- FIRE & EXPLOSION DATA

Flash Point: N/A °F Method Used: N/A
Flammable Limits in Air: N/A LEL Lower: UEL Upper:
Auto-Ignition Temp: N/A Extinguisher Media: Non flammable if involved in fire, can extinguish with dry chemical; CO₂, water spray or foam.

Special Fire Fighting Procedures: This product is non-flammable, and does not support combustion. If heated to decomposition the nitrate ion will support combustion and could explode. Use of self contained breathing apparatus is recommend.
Fire run-off water should be contained to prevent environmental contamination.

Unusual Fire and Explosion Hazards: If this product is heated to an anhydrous state it will emit nitrates which are oxidizing agents. Exposure to high heat can emit toxic vapors.

SECTION 5- PHYSICAL HAZARDS (REACTIVITY DATA)

Stability: Stable Unstable Conditions to Avoid: Excessive heat

Incompatibility Materials to Avoid!: Organic or easily oxidizable matter. Alkalis or caustic liquids.
Do not mix in concentrated form with bases or bleaches.

SECTION 5- PHYSICAL HAZARDS (REACTIVITY DATA)..Continued

Hazardous Decomposition Products: Under extreme heat or fire, may liberate hazardous gasses of oxides of nitrogen and ammonia

Hazardous Polymerization: May Occur: Will Not Occur:

Conditions to Avoid: Extreme Heat.

SECTION 6- HEALTH HAZARDS

ACUTE: Mild skin irritant, conjunctivitis, upset stomach and/or gastrointestinal symptoms are temporary. Irritation to open cuts or wounds.

CHRONIC: Prolonged skin contact may result in dermatitis (drying) or eczema (itching) May cause skin irritation and tissue damage.

CARCINOGEN LISTED IN: _____ **NTP IARC MONOGRAPH** _____ **OSHA NOT LISTED** **X**

ROUTES OF ENTRY AND EMERGENCY FIRST AID PROCEDURES

- 1. **Inhalation:** No hazard under normal conditions. If necessary move victim to fresh air. If symptoms persist, call a physician. Administer CPR if necessary.
- 2. **Eyes:** Flush eyes with running water for 15 minutes. If redness persists, seek medical attention
- 3. **Skin:** Remove contaminated clothing, wash with clean water and soap. Put on clean clothes.
- 4. **Ingestion:** Give large amounts of water. DO NOT INDUCE VOMITING. Call physician immediately.

SECTION 7- SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken

Handling and Storage: Store in cool ventilated place away from fire hazards, excessive heat, flammable or easily oxidizable materials. Do not allow product to dry out. Corrosive to many metals such as mild steel or other galvanized products.

Other Precautions: Do not allow product to go below 35 degrees. Apply product in open areas. Keep away from children and pets. Do not contaminate feed, seed or any water sources.

Steps to be taken in case of Release or Spill: Dike area and maximize recovery. Pump into a tank or absorb with diatomaceous earth or sand. Sweep up and place into containers for land application at recommended rates. Prevent entry into sewer or waterways.

Environmental

Precautions: Relatively low toxicity to fish and aquatic organisms. Do not contaminate any waterway, lake, stream or estuary by direct application of cleaning of equipment or disposal. Triple rinse containers and offer for recycling or dispose of in an approved landfill. Consult Federal, state and local regulations for proper disposal.

SECTION 8- CONTROL AND PROTECTIVE MEASURES

Respiratory Protection: None required if used in open under normal conditions.
Respiratory protection may be required in the event of a spill in an enclosed area.
Use SCBA when fighting fires.

Protective Gloves: Impervious gloves from rubber or nitrile.

Eye Protection: Side-shielded safety glasses or chemical splash-proof goggles.

Other Protective

Clothing or equipment: Eye wash station with safety shower. Use of a chemically resistant apron may be required for some activities.

Hygienic Work Practice Bathe and change clothes daily. Wash contaminated clothing separate from other laundry.

SECTION 9- TRANSPORT AND REGULATORY INFORMATION

MATERIAL IS NOT HAZARDOUS AS DEFINED BY 49 CFR 172.101 BY THE U.S. DEPARTMENT OF TRANSPORTATION

Proper Shipping Name: None

Hazard Class Number: None

Description: None

UN Identification

Number: None

Packing Group: None

DOT Label(s) Required: None

NFPA CODE: Health = 1 Flammability = 0 Reactivity = 0

Toxicity: Oral rat Urea LD50 = 14300 mg/kg.