S A SOUTHERN D AG. FLOREL PLANT GROWTH REGULATOR MATERIAL SAFETY DATA SHEET

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Manufacturer's Name & Address

Southern Agricultural Insecticides, Inc. Phone: 1-941-722-3285 P.O. Box 218, Palmetto, Fla. 33420 Chemtrec: 1-800-424-9300

KEY	
NFPA	NFPA
4 - EXTREME	HEALTH
3 - HIGH	1
2 - MODERATE	FIRE
1 - SLIGHT	0
0 - MINIMAL	REACTIVITY
	0

INOMENCLATURE

Product Name: FLOREL PLANT GROWTH REGULATOR EPA Reg. No.264-263-829

Chemical Name: (2-CHLOROETHYL) PHOSPHONIC ACID CAS No. 16672-87-0

Synonyms: ETHEPHON

Chemical Family: PHOSPHONIC ACID

IIINGREDIENTS

Ethephon ((2-Chloroethyl) Phosphonic Acid) 3.9% CAS No. 16672-87-0

III PHYSICAL PROPERTIES

Boiling Point: not known Freezing Point C⁰ (F⁰): -1 (30)

Vapor Pressure: (mmHg) (solvent) 0.0000605 @ 100°F Reid Specific Gravity: 1.016 @ 20 degrees C

Vapor Density: (air=1)(solvent) not known Solubility In Water: Soluble

Appearance/Odor: Colorless, Clear liquid; Odorless Decomposition Temperature: 170° C

IV FIRE AND EXPLOSION DATA

Flash Point: Noncombustible Autoignition Temp.: none

Flammability limits in air % by volume: none

Extinguishing Media: Not combustible. Use appropriate extinguishing media for material that is supplying fuel. **Special Fire Fighting Procedures:** Use positive self contained breathing apparatus. Wear protective clothing. Dike area to prevent runoff and contamination of water sources.

Unusual Fire & Explosion Hazards: Thermal decomposition products may include Hydrogen Chloride.

VHEALTH HAZARD DATA

<u>Toxicology Data:</u>

Oral LD50 (rats): >20,000 mg/kg body weight

Dermal LD50 (rats): >2,000 mg/kg body weight

Inhalation LC50 (rats): no information available

Skin effects (rabbits): not irritating Eye effects (rabbits): not irritating

Carcinogenicity, Teratogenicity, Mutagenicity:

The active ingredient in this product was not mutagenic in "IN VITRO" or in "IN VIVO" studies. In addition, the active ingredient has been shown not to be teratogenic or carcinogenic in animal studies. This product does not contain any chemicals listed as carcinogens by IARC, NTP or OSHA.

<u>Medical Conditions Aggravated by Exposure</u>: Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

VI FIRST AID

First Aid for EYE Exposure: Irrigate with flowing water immediately and continuously for 15 minutes. Water flush should get under eyelids. See a physician.

First Aid for SKIN Exposure: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing. Call a physician if irritation persists. Wash clothing before reuse or discard if they cannot be thoroughly cleaned.

First Aid for INHALATION: Remove to fresh air. If not breathing give mouth to mouth resuscitation. If breathing is difficult give oxygen. Call a physician.

First Aid if SWALLOWED: If patient is conscious and alert, give 2-3 glasses of water to drink. Do not induce vomiting. Get medical attention. Do not leave person unattended. To prevent aspiration of swallowed product, lay person on side with head lower than waist Vomiting may occur spontaneously. If vomiting occurs and the person is conscious give water to further dilute the chemical.

Note to physician: No specific antidote is available. Treat symptomatically. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. The primary toxicity of this product

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is due to its irritant properties on mucosal surfaces.

In a patient with severe overexposure by ingestion, careful gastric lavage is required due to the possibility of stomach or esophageal perforation. This material is an acid, but the use of alkaline substances to neutralize is contraindicated. **SYMPTOMS of OVEREXPOSURE:** This product may cause mild to moderate peripheral cholinesterase inhibition, depending on the degree and duration of exposure. CNS cholinesterase depression has not been observed in any of the animal studies. The usefulness of conventional treatment for cholinesterase inhibiting agents, I.E. Atropinization, has not been established for this product.

VIIREACTIVITY

Stability: Stable at ambient temperatures.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Temperatures above 170 degrees C (338 F) and pH below 3

Materials to Avoid: Alkali media and strong acidic conditions. Corrosive to metals such as iron, aluminum & copper.

Incompatibility: Zinc, strong bases, strong acids, strong oxidizing agents, mild steel aluminum.

Hazardous Decomposition Products: Decomposition products may be hazardous. These may include hydrogen

chloride. Reaction with bases causes evolution of ethylene gas.

VIII SPILL OR LEAK PROTECTION

Steps To Be Taken If Spilled: Confine spills. Absorb spills with dry material such as sand, sawdust, absorbent clay or dirt, and sweep up for disposal.

Waste Disposal: Do not contaminate food, feed, or water by storage or cleaning of equipment. Pesticide, spray mixture or rinse that can not be used according to label instructions must be disposed according to applicable Federal, State, and local procedures. Keep out of domestic or natural waters.

IX SPECIAL PROTECTION

Respiratory: Where adequate ventilation is not available and where exposure to spray mist could occur, wear a NIOSH approved respirator with a pesticide cartridge.

Ventilation: Mechanical (general) ventilation.

Gloves: Yes if contact would occur. Type of Gloves: Clean, chemical resistant

Eye Protection: Yes, goggles or glasses with side shields.

Body Protection: Skin contact must be prevented through use of permeation resistant clothing, gloves and footwear, selected with regard for useconditions and exposure potential. Consideration must be given both to durability as well as permeation resistance. An emergency shower must be readily accessible to the work area.

Other Protective Equipment: Clean work clothes. Do not wear contaminated clothing. Eye wash facility available.

X SPECIAL PRECAUTIONS

Handling Precautions: Avoid ingestion. Avoid skin and eye contact. Do not breathe vapors or spray mist. Handle concentrate in well ventilated area. Avoid container damage. Wash thoroughly after handling.

Storage Precautions: Store in cool well ventilated area. Do not put leaking or damaged containers in storage. Do not store with feed or food.

Container Disposal: consult state and local regulations regarding the proper disposal of container.

EPA HAZARDOUS WASTE-NO

RCRA Classification: Not regulated under this Statute **Other Precautions:** KEEP OUT OF REACH OF CHILDREN

XIREGULATORY INFORMATION

TSCA list: None

TSCA 12b export notification: None

SARA Title III - section 302 - notification and information: None SARA Title III - section 313 - toxic chemical release reporting: None

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.