

Material Safety Data Sheet

Effective Date: 18-JUL-2007

Product: FLASH

I. IDENTIFICATION

Chemical Name: (2-Chloroethyl) phosphonic acid
Chemical Family: Ethylene generator
Formula: Not applicable, formulated mixture.
Synonyms: 3 Lb. Ethephon
CAS Number: 16672-87-0 (ethephon)
EPA Number: 66330-363-5905

II. PHYSICAL DATA

Boiling Point: Unknown
Freezing Point: <-20 Deg. C.
Spec Gravity: 1.31 gms/cc
Vapor Pressure: 0.0006 mm/Hg
Vapor Density: Not determined
Solubility: 100%
Volatiles: <5%
Evaporation: Not determined
Melting Point: Not applicable
Appearance: Pale yellow liquid with no appreciable odor.

III. INGREDIENTS

Material	CAS Number	Percent	TLV	Hazard
Ethephon	16672-87-0	27.00	N/E	Corrosive; skin & eye irritant.
Inert ingredients, including organic acids.		73.00	N/E	Skin & eye irritant.

IV. FIRE AND EXPLOSION HAZARD

Flash Point: Non-combustible
Autoignition Temp: Not determined
Flammable Limit: Not applicable
Extinguishing Media: Will not burn. Use appropriate extinguishing media for material that is supplying fuel to fire.
Special Fire Fight Proc: Wear self-contained breathing apparatus with full face piece.
Fire and Expl Hazard: May emit hydrogen chloride under fire conditions.

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V. HEALTH HAZARD

Carcinogen Information: Not listed by NTP, IARC or OSHA.

ACUTE EFFECTS OF OVER EXPOSURE

Swallowing: Harmful if swallowed. Corrosive, may cause severe and permanent damage to the mouth, throat and stomach. Symptoms of overexposure may include severe irritation of the mouth, throat, esophagus and stomach with severe abdominal and chest pain.

Skin Absorption: Substance is harmful if absorbed through the skin.

Inhalation: Spray mist concentrations may be harmful. High concentrations may be fatal. Symptoms of overexposure may include choking, coughing and burning of the throat.

Skin contact: Direct skin contact can cause chemical burns. Symptoms include redness and swelling. Large exposures may be fatal.

Eye Contact: Corrosive. This material will cause eye burns and permanent tissue damage. Symptoms include tearing, redness, burning and swelling.

Chronic Effects: Acute asthma and/or other chronic pulmonary diseases may be aggravated by exposure due to inhalation of vapors or spray mists.

Other Hazard: Existing skin lesions and/or skin sensitivities may be irritated by exposure.

EMERGENCY AND FIRST AID PROCEDURES

Swallowing: Do not induce vomiting. Promptly drink a large amount of milk, egg whites, gelatin solution or, if these are not available, large amounts of water. Do not drink any alcohol. Call a physician immediately.

Skin: Immediately wash skin with plenty of soap and water. Seek medical attention if irritation persists.

Inhalation: Move to fresh air. If not breathing, give artificial respiration. Administer oxygen if necessary. Get medical attention.

Eyes: Hold eyelids open and flush with a gentle stream of water for at least 15 minutes. Seek medical attention, preferably with an ophthalmologist.

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Notes to Physician: There is no specific antidote. All treatment should be based on observed signs and symptoms of distress in the patient. Victims of overexposure by inhalation should be kept under medical observation for up to 72 hours for delayed onset of pulmonary edema. For a victim of overexposure by ingestion, careful gastric lavage is required due to the possibility of stomach or esophageal perforation. Although this material is an acid, use of alkaline substances to neutralize is contraindicated.

VI. REACTIVITY

Stability: Stable
Conditions to Avoid: Avoid temperatures above 335 Degrees F. and pH >3.0.
Polymerization: Will Not Occur
Conditions to Avoid: None currently known.
Incompatibility material: Oxidizing agents and alkaline materials.
Corrosive to iron, mild steel, aluminum and copper.
Hazardous Combustion: Hydrogen chloride during thermal decomposition.
Reaction with alkaline materials causes evolution of ethylene gas.

VII. SPILL OR LEAK PROCEDURES

Spill or Leak Proc: Absorb with an absorbent material, such as clay, sand or Vermiculite. Place contaminated material in appropriate container for disposal. Do not allow any material to enter drainage systems or bodies of water.
Waste Disposal Method: This material must be disposed of according to Federal, State or Local procedures under the Resource Conservation and Recovery Act.

VIII. SPECIAL PROTECTION INFORMATION

Respiration: Use NIOSH-approved air-purifying respirator with organic vapor cartridge.
Ventilation: Good general ventilation should be sufficient to control airborne levels.
Gloves: Waterproof gloves.

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Eyes: Safety goggles.
Other: Emergency shower, eyewash station, long-sleeved
shirt and long pants, shoes plus socks.

IX. SPECIAL PRECAUTIONS

Special precaution: Keep out of reach of children. Do not store
with food, feed or other material to be used or
consumed by humans or animals. Do not
contaminate water supplies, lakes, streams,
ponds or drains. Store in a tightly closed
container.

Other precaution: Chemical-resistant apron or coveralls should be
used when mixing, loading or cleaning
equipment. This mixture has a pH of 1.7. If
disposal is necessary, handle as a D002
hazardous waste for corrosivity.

X. SHIPPING INFORMATION

Shipping name: Corrosive Liquid, Acidic, Organic, n.o.s.
(Ethephon), 8, UN3265, PG III "ERG # 153"

Hazard Class: Corrosive (8)

Identification No: UN 3265

Labels Required: Corrosive (8)

Placarding: Corrosive (8)

Freight Class: Plant Growth Regulator, Modifier or Inhibitor,
Liquid, N.O.I. (NMFC Item 50320, Class 60)

Chemical Name

Equivalent R.Q.

Not applicable

Not applicable

XI. GENERAL PRODUCT INFORMATION

National Fire Protection Association Rating:

(Rating level: 4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

Health: 2

Fire: 1

Reactivity: 0

S.A.R.A. Title III Hazard Classification: (Yes/No)

Immediate (Acute) Health: Y
Sudden Release of pressure: N
Reactive: N

Delayed (Chronic) Health: N
Fire: N

Helena Chemical Company
PH: 901-761-0050
CHEMTREC: 800-424-9300

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Mail inquiries to: 225 Schilling Blvd., Suite 300 Collierville, TN 38017
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