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

Material Safety Data Sheet

Effective Date: 21-NOV-2006 Product: FIREBALL

I. IDENTIFICATION

Chemical Name: Glyphosate Herbicide Chemical Family: Non-selective Herbicides

Formula: Not applicable, formulated mixture.

Synonyms: None

CAS Number: Not applicable, formulated mixture.

EPA Number: 5905-560

II. PHYSICAL DATA

Boiling Point: Not determined Freezing Point: <32 Degrees F. Spec Gravity: 1.632 gms/cc Vapor Pressure: Not determined Vapor Density: Not determined

Solubility: 100%

Volatiles: Not determined Evaporation: Not determined Melting Point: Not applicable

Appearance: Clear liquid with low odor.

III. INGREDIENTS

Material	CAS Number	Percent	TLV	Hazard
Glyphosate: N- (phosphonomethyl) glycine	1071-83-6	12.00	N/E	Severe eye & moderate skin irritant.
Phosphoric Acid	7664-38-2	83.00	1 mg/m3	Corrosive to skin & eyes.
Inert ingredients		5.00	N/E	Non-hazardous

IV. FIRE AND EXPLOSION HAZARD

Flash Point: Not flammable Autoignition Temp: Not applicable Flammable Limit: Not determined

Extinguishing Media: Use water fog, alcohol foam, dry chemical and

carbon dioxide extinguishing media. Use water

fog to keep fire-exposed containers cool.

Special Fire Fight Proc: Wear positive pressure self-contained breathing

apparatus and full protective clothing. Avoid getting water from fire fighting into domestic

or irrigation water supplies.

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Fire and Expl Hazard: Toxic vapors may be formed under fire

conditions.

V. HEALTH HAZARD

Carcinogen Information: Not currently listed.

ACUTE EFFECTS OF OVER EXPOSURE

Swallowing: Ingestion of this mixture can produce burns on the mouth and lips, severe gastrointestinal irritation, nausea, bloody diarrhea, difficult swallowing, severe abdominal pains, thirst, acidemia, difficult breathing, convulsions,

collapse, shock or death.

Skin Absorption: Skin contact is the primary route of exposure.

This material is corrosive to skin.

Inhalation: Inhalation of mists or vapors may be harmful.

Symptoms may include severe irritation and burns to the nose, throat and respiratory tract.

Skin contact: May cause permanent skin burns upon contact.

Symptoms include redness, burning and swelling

of skin with burns or other skin damage.

Eye Contact: Can cause permanent eye injury. Symptoms include stinging, tearing, redness or swelling

of eyes. Can injure the cornea and cause

blindness.

Chronic Effects: There is a remote risk of pulmonary edema from

inhalation of vapors or mists containing

phosphoric acid.

Other Hazard: Mists or solutions containing phosphoric acid,

such as this mixture, may cause dermatitis.

EMERGENCY AND FIRST AID PROCEDURES

Swallowing: If conscious, immediately drink 2 glasses of water. Do NOT induce vomiting! Get medical

attention immediately.

Skin: Immediately flush affected area with water, continuing for at least 15 minutes, while removing contaminated clothing and shoes. Seek

immediate medical attention. Wash clothing before reuse and decontaminate or discard

contaminated shoes.

Inhalation: If symptoms develop, immediately move to fresh

air. Seek immediate medical attention.

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Eyes: Immediately flush eyes with water for at least 15 minutes, while holding the eyelids open. If symptoms develop as a result of vapor exposure, move to fresh air and then flush eyes with water for at least 15 minutes. Seek immediate

medical attention.

Notes to Physician: This product contains phosphoric acid and has

a very low pH. In the event of an adverse response, treatment should be directed toward

control of the symptoms and the clinical

condition of the patient.

VI. REACTIVITY

Stability: Stable

Conditions to Avoid: None currently known.

Polymerization: Will Not Occur

Conditions to Avoid: None currently known.

Incompatibility material: Severely corrosive to steel. Avoid strong

caustics, sulfides and sulfites, and strong

bases.

Hazardous Combustion: Toxic gases and vapors, such as phosphoric acid

fume, may be released under fire conditions.

VII. SPILL OR LEAK PROCEDURES

Spill or Leak Proc: Dike all spills to prevent spreading. For small spills, cover with sodium bicarbonate or 50:50

spills, cover with sodium bicarbonate or 50:50 mixture of soda ash/flaked lime. Mix and add water if necessary to form a slurry. Scoop up slurry and wash site with soda ash solution. Place recovered materials in chemical waste

containers for disposal.

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 respirator if vapor levels

exceed TLV.

Ventilation: General (mechanical) room ventilation should be

sufficient.

Gloves: Impervious (neoprene, nitrile rubber, PVC).

Eyes: Splashproof goggles or face shield.

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Other: Emergency shower, eyewash station, impervious

apron and footwear.

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 or ponds with this material. Empty containers may retain vapor and residue and should be treated

with caution.

Other precaution: This material has a pH </=2.0. If disposed,

this product must be classified as a D002 hazardous waste for corrosivity, unless

neutralized.

X. SHIPPING INFORMATION

Shipping name: Corrosive Liquid, n.o.s. (Phosphoric Acid), 8,

UN1760, PG III "ERG # 154"

Hazard Class: Corrosive (8)

Identification No: UN1760

Labels Required: Corrosive (8)
Placarding: Corrosive (8)

Freight Class: Compound, Weed Killing, Liquid, (Glyphosate),

N.O.I. (NMFC Item 50320, Class 60)

Chemical Name Equivalent R.Q.

Phosphoric Acid (CAS No. 7664-38-2) 5,000 lbs.

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: 1

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

Immediate (Acute) Health: Y Delayed (Chronic) Health: Y Sudden Release of pressure: N Fire: N

Reactive: N

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