

Material Safety Data Sheet

Effective Date: 15-JAN-2006  
Product: HEL-FIRE

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I. IDENTIFICATION  
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Chemical Name: MCDS Buffer Blend  
Chemical Family: Water Conditioner and Buffer  
Formula: Not applicable, formulated mixture.  
Synonyms: None  
CAS Number: 21351-39-3  
EPA Number: Not applicable

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II. PHYSICAL DATA  
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Boiling Point: Not available  
Freezing Point: Not available  
Spec Gravity: 1.19 gms/cc  
Vapor Pressure: Not available  
Vapor Density: Not available  
Solubility: Soluble  
Volatiles: Not determined  
Evaporation: Not available  
Melting Point: Not applicable  
Appearance: Clear golden yellow liquid; slight, pleasant odor.

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III. INGREDIENTS  
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Material	CAS Number	Percent	TLV	Hazard
Proprietary blend of fertilizer, water conditioner and buffer (MCDS buffer blend CAS No. 21351-39-3).		100.00	1 mg/m3 (acids)	Corrosive

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IV. FIRE AND EXPLOSION HAZARD  
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Flash Point: >200 Degrees F. (PMCC)  
Autoignition Temp: Not applicable  
Flammable Limit: Not determined  
Extinguishing Media: Use water spray in the form of a fog, dry chemical, foam or carbon dioxide extinguishing agents.  
Special Fire Fight Proc: Avoid excessive water. Wear self-contained breathing apparatus and full protective clothing. Treat as a liquid chemical type fire where discharges to the environment are to be controlled as quickly as possible.

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Fire and Expl Hazard: May produce oxides of carbon, nitrogen and  
toxic phosphorous compounds under fire  
conditions.  
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V. HEALTH HAZARD  
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Carcinogen Information: None currently known.

ACUTE EFFECTS OF OVER EXPOSURE  
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Swallowing: Small amounts aspirated into the respiratory  
system during ingestion or vomiting may cause  
severe burns and severe pulmonary injury.  
Aspiration into lungs due to vomiting can cause  
chemical pneumonitis, which can be fatal.  
Skin Absorption: Contact may result in mild dermatitis.  
Inhalation: May cause irritation and burning to the upper  
respiratory tract.  
Skin contact: Contact may result in mild dermatitis. Skin  
contact may aggravate an existing dermatitis  
condition.  
Eye Contact: Contact with eyes may result in severe  
irritation; permanent eye injury may result.  
Chronic Effects: None currently known.  
Other Hazard: Persons with pre-existing dermatitis,  
respiratory disorders, or an allergic history  
should use extra care in handling this  
material.

EMERGENCY AND FIRST AID PROCEDURES  
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Swallowing: Do not induce vomiting. If fully conscious,  
drink a large amount of water. Never give  
anything by mouth to someone who is unconscious  
or having convulsions. Apply artificial  
respiration if necessary. Call a doctor or  
poison control center immediately.  
Skin: Immediately flush skin with water while  
removing contaminated clothing. Obtain medical  
attention immediately. Wash contaminated  
clothing before reuse.  
Inhalation: Immediately move to fresh air. If not  
breathing, give artificial respiration. Call  
for prompt medical attention.  
Eyes: Flush eyes with plenty of water, holding  
eyelids apart for at least 15 minutes. Do not  
rub eyes. Obtain medical attention immediately.

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Notes to Physician: Aspiration of small amounts during ingestion or vomiting may cause severe burns and severe pulmonary injury to the lungs. Aspiration may also cause chemical pneumonitis, which can be fatal.

VI. REACTIVITY

Stability: Stable  
Conditions to Avoid: None currently known.  
Polymerization: Will Not Occur  
Conditions to Avoid: None currently known.  
Incompatibility material: Avoid bases, strong oxidizing and reducing agents. Avoid contact with many metals, including aluminum.  
Hazardous Combustion: May produce oxides of carbon, nitrogen and toxic phosphorous compounds under fire conditions.

VII. SPILL OR LEAK PROCEDURES

Spill or Leak Proc: Contain all spills, keeping material out of sewers and drains by diking. For small spills, collect free liquids and place in suitable container for disposal. Absorb remaining liquid with an inert material, such as clay or vermiculite. Sweep up carefully and place in suitable disposal container. Rinse spill area with water, collect and place in containers with material 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 an approved NIOSH respirator if ventilation is not adequate, particularly in hot, non-ventilated spaces.  
Ventilation: Ensure adequate ventilation to maintain airborne concentrations below the TLV.  
Gloves: Chemical-resistant gloves.  
Eyes: Safety glasses with side shields.  
Other: Full-length work clothing, enclosed boots, impervious apron, emergency shower and eyewash station.

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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. Avoid eye and prolonged skin contact. Avoid inhalation of mists.

Other precaution: Store in original container only in a well-ventilated, cool, dry and secure area. Due to low pH (2.0 to 2.5), this material will corrode incompatible metals, such as aluminum, copper, zinc and mild steel.

X. SHIPPING INFORMATION

Shipping name: Not regulated domestically (highway) if shipped or packaged in containers such as stainless steel or plastic (49 CFR 173.154(d)).

Hazard Class: None  
Identification No: None

Labels Required: None required  
Placarding: None

Freight Class: Compound, Fertilizer (Manufactured Fertilizer), Liquid, NOIBN (NMFC Item 68140, Sub 6, Class 70)

Chemical Name

Equivalent R.Q.

Not applicable

Not applicable

TRANSPORTATION NOTE:

If shipped domestically in aluminum, copper, zinc or mild steel containers; or if shipped by air or water, ship as:  
Corrosive Liquid, n.o.s. (contains Monocarbamide dihydrogen sulphate), 8, UN1760, PG III "ERG # 154"

XI. GENERAL PRODUCT INFORMATION

National Fire Protection Association Rating:

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

Health: 2

Fire: 0

Reactivity: 2

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

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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: Y	

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