



Safety Data Sheet

Report Date 11-Mar-15

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1. Identification

Product Name : QUEST
Synonyms : None
Product Use : Water Conditioning Agent and AMS Replacement
Manufacturer/Supplier : Helena Chemical Company
Address : 225 Schilling Blvd. Collierville, TN 38017
General Information : 901-761-0050
Transportation Emergency Number : CHEMTREC:800-424-9300

2. Hazard Identification



Signal Word : Warning
Skin Irritation : Slightly irritating to the skin based on 4 hour exposure.
Eye Irritation : Minimally irritating
Acute Toxicity Oral : LD50 = 5,000 mg/kg (rat)
Acute Toxicity Dermal : LD50 > 2,000 mg/kg (rat)

Hazard Categories : Skin sensitizer-1; Skin irritation-2; Eye irritation-2B;
Oral/Dermal/Inhalation Toxicity-5/5/5

Hazard Statement : Causes skin irritation
May be harmful if swallowed
May be harmful in contact with skin
May cause an allergic skin reaction
May be harmful if inhaled
Causes eye irritation

3. Composition / Information on Ingredients

| Component | CAS Number | Weight % |
|---|--------------|----------|
| Proprietary blend of the ammonium salts of polyacrylic, hydroxy carboxylic and phosphoric acids | Proprietary | 50.00 |
| Other ingredients, components ineffective as water conditioners | Nonhazardous | 50.00 |

4. First Aid Measures

Eye : Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.

Skin : Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

Inhalation : Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth if possible. Call a poison control center or doctor for further treatment advice.

Ingestion : Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything if unconscious or convulsing.

Indication of Immediate Medical Attention and Special Treatment Needed : Treat symptomatically.



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5. Fire Fighting Measures

- Extinguishing Media** : Non-combustible, aqueous liquid. Use extinguishing media suitable to underlying cause of fire.
- Specific Hazards Arising from the Chemical** : Product may produce toxic fumes under fire conditions.
- Special Fire Fight Proc** : Use self-contained breathing apparatus and full protective clothing. Use water spray to cool containers exposed to fire.

6. Accidental Release Measures

- Personal Precautions** : Keep unprotected and unnecessary personnel out of spill area. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist if present.
- Protective Equipment** : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Eyewash station and emergency shower should be available in work area. Respiratory protection not normally needed; use NIOSH-approved respirator for ammonia if vapors are present.
- Emergency Procedures** : Contain spilled product. Do not contaminate water supplies, lakes, streams, ponds or drains if spilled.
- Methods and Materials for Containment and Cleanup** : Collect and reuse spilled liquid, if uncontaminated. If contaminated, absorb spill with inert material, such as clay or sand. Collect and place in suitable container for proper disposal.

7. Handling and Storage

- Precautions for Safe Handling** : Keep out of reach of children. Keep container tightly closed and do not allow other chemicals to be introduced into the container. Do not contaminate water sources by runoff from cleaning of equipment washwaters or spray waste.
- Conditions for Safe Storage** : Store in original container only. Product may crystallize at temperatures below 33 Degrees F. Do not store with food, feed or other material to be used or consumed by humans or animals.

8. Exposure Controls / Personal Protection

- TLV/PEL** : Not established for mixture.
- Appropriate Engineering Controls** : Local exhaust sufficient.
- Personal Protective Equipment** : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Eyewash station and emergency shower should be available in work area. Respiratory protection not normally needed; use NIOSH-approved respirator for ammonia.

9. Physical and Chemical Properties

- Odor/Appearance** : Clear colorless/pale yellow liquid; odorless.
- Flash Point, °F** : Not flammable
- Boiling Point, °F** : >100 Degrees C.
- Melting Point(Freezing point), °C** : <10 Degrees C.
- Vapor Pressure, mm Hg @ 20 °C** : 23.76 mmHg at 25 Degrees C.
- Vapor Density** : Not determined
- Solubility in Water** : Dissolves
- Molecular Formula** : Not applicable, formulated mixture.



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Density, g/mL @ 25 °C : 1.305
Evaporation Rate(Butyl Acetate = 1) : No information found
Octanol/Water Partition Coefficient : No information found
pH : 2.0-4.0
Flammable Limits (approximate volume % in air) : Not applicable
Auto-ignition Temperature : Not applicable
Decomposition temperature : No information found

10. Stability and Reactivity

Reactivity : Not reactive
Chemical Stability : Stable
Hazardous Decomposition : May produce ammonia gas, nitrogen oxides and oxides of carbon under fire conditions.
Hazardous Polymerization : Will not occur
Conditions to Avoid : Avoid extreme heat and open flames. Ammonia gas will be emitted if exposed to extreme heat or flames.
Incompatible Materials : Avoid contact with potassium chlorate and potassium nitrate.

11. Toxicological Information

Acute Toxicity (Oral LD50) : 5,000 mg/kg
Acute Toxicity (Dermal LD50) : >2,000 mg/kg
Acute Toxicity Inhalation LC50 : >5.01 mg/L
Likely Routes of Exposure : Skin and eyes.
Skin Irritation : Slightly irritating to the skin based on 4-hour exposure.
Eye Irritation : Minimally irritating.
Skin Sensitization : May cause allergic skin reaction in sensitive individuals.
Carcinogenic : Not listed by IARC, NTP or OSHA.
Chronic Effects : None currently known.
Other Hazards : No information found.

12. Ecological Information

Ecotoxicity : No information found
Persistence and Degradability : No information found
Bioaccumulative Potential : No information found
Mobility in Soil : No information found
Other Adverse Effects : None currently known.

13. Disposal Considerations

Waste Disposal Method : This material must be disposed of according to Federal, State or Local procedures under the Resource Conservation and Recovery Act.

14. Transport Information

UN Proper Shipping Name : Not regulated by DOT, IATA or IMDG.



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Transport Hazard Class : None
UN Identification Number : None
Packaging Group : None
Environmental Hazards : No information found
Transport in Bulk : No information found
Special Precautions for Transportation : No information found
Freight Classification : Fertilizing Compound, (Manufactured Fertilizer), Liquid, NOIBN (NMFC Item 68140, Sub 6, Class 70)

15. Regulatory Information

National Fire Protection Association Rating :

Health: 2 Fire: 0 Reactivity: 0
Rating Level: (4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

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

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

16. Other Information

Data of Preparation/Revision : 11-March-2015