



## Safety Data Sheet

Report Date 17-Sep-19

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### 1. Identification

**Product Name** : ZANDAR  
**Synonyms** : None  
**Product Use** : Penetrant-Acidifier-Surfactant  
**Manufacturer/Supplier** : Helena Agri-Enterprises, LLC  
**Address** : 225 Schilling Blvd. Collierville, TN 38017  
**General Information** : 901-761-0050  
**Transportation Emergency Number** : CHEMTREC:800-424-9300

### 2. Hazard Identification



**Signal Word** : Danger  
**Skin Irritation** : Causes severe skin burns and eye damage.  
**Eye Irritation** : Causes serious eye damage.  
**Acute Toxicity Oral** : LD50 (rat) > 5,000 mg/kg.  
**Acute Toxicity Dermal** : LD50 (rabbit) > 5,000 mg/kg.

**Hazard Categories** : Eye Irritation-1; Skin Irritation-1A

**Hazard Statement** : Causes severe skin burns and eye damage

### 3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Phosphatidylcholine, methylacetic acid, and alkyl polyoxyethylene ether.	Proprietary	80.0
Inert ingredients, ineffective as adjuvants.	Proprietary	20.0

### 4. First Aid Measures

**Eye** : Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further 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. Rinse mouth with water. Do not induce vomiting. Do not give anything by mouth if unconscious.

**Indication of Immediate Medical Attention and Special Treatment Needed** : In the event of an adverse response, treatment should be directed toward control of the symptoms.

### 5. Fire Fighting Measures

**Extinguishing Media** : Use water, dry chemical or carbon dioxide (CO2) extinguishing agents.

**Specific Hazards Arising from the Chemical** : None currently known.



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**Special Fire Fight Proc** : Wear a positive pressure self-contained breathing apparatus and proper protective gear. Minimize runoff.

### 6. Accidental Release Measures

- Personal Precautions** : Keep unprotected and unnecessary personnel out of spill area.
- Protective Equipment** : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Respiratory protection not normally needed. Eyewash and emergency shower should be available in work area.
- Emergency Procedures** : Contain spilled product to prevent contamination of waterways, drains or sewers.
- Methods and Materials for Containment and Cleanup** : Absorb spilled liquid with inert absorbent. Pick up absorbent materials and place in a container for proper disposal in accordance with applicable regulations.

### 7. Handling and Storage

- Precautions for Safe Handling** : Keep locked up and out of reach of children. Do not contaminate water, food or feed by storage, handling or disposal. Keep container tightly closed. Do not allow water to be introduced into the contents of the container.
- Conditions for Safe Storage** : Store in original container only. Do not store near heat or open flame. Do not store with oxidizing agents or ammonium nitrate.

### 8. Exposure Controls / Personal Protection

- TLV/PEL** : No TLV or PEL available for mixture.
- Appropriate Engineering Controls** : General ventilation recommended. Use mechanical ventilation if handled indoors.
- Personal Protective Equipment** : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Respiratory protection not normally needed. Eyewash and emergency shower should be available in work area.

### 9. Physical and Chemical Properties

- Odor/Appearance** : Yellow to brown liquid; vinegar-like odor.
- Flash Point, °F** : >200 Degrees F. (TCC)
- Boiling Point, °F** : >212 Degrees F.
- Melting Point(Freezing point), °C** : 35 Degrees F.
- Vapor Pressure, mm Hg @ 20 °C** : Not available
- Vapor Density** : Not available
- Solubility in Water** : Emulsifies in water
- Molecular Formula** : Not applicable, formulated mixture.
- Density, g/mL @ 25 °C** : 0.99-1.03
- Evaporation Rate(Butyl Acetate = 1)** : Not available
- Octanol/Water Partition Coefficient** : No information found
- pH** : 3.0 to 4.0 (0.25%)
- Flammable Limits (approximate volume % in air)** : Not determined
- Auto-ignition Temperature** : Not determined
- Decomposition temperature** : No information found



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### 10. Stability and Reactivity

- Reactivity** : Not reactive
- Chemical Stability** : Stable
- Hazardous Decomposition** : None currently known.
- Products**
- Hazardous Polymerization** : Will not occur
- Conditions to Avoid** : Avoid highly alkaline conditions, extreme temperatures and open flames.
- Incompatible Materials** : Avoid contact with strong oxidizers and strong alkaline materials.

### 11. Toxicological Information

- Acute Toxicity (Oral LD50)** : >5,000 mg/kg (rat). Not classified as hazardous under 29 CFR 1910.1200 (2012).
- Acute Toxicity (Dermal LD50)** : >5,000 mg/kg (rabbit). Not classified as hazardous under 29 CFR 1910.1200 (2012).
- Acute Toxicity Inhalation LC50** : No LC50 available. Vapors are irritating to eyes, nose, throat. Not classified as hazardous.
- Likely Routes of Exposure** : Skin, eyes
- Skin Irritation** : Causes severe skin burns and eye damage.
- Eye Irritation** : Causes serious eye damage.
- Skin Sensitization** : No information found
- Carcinogenic** : Not listed by IARC, NTP or OSHA.
- Chronic Effects** : None currently known.
- Other Hazards** : None currently known.

### 12. Ecological Information

- Ecotoxicity** : No LC50 data available (algae). EC50 (daphnia) = 190 mg/L. LC50 (fish) = 130 mg/L.
- Persistence and Degradability** : Not established
- Bioaccumulative Potential** : Not established
- Mobility in Soil** : Not available
- Other Adverse Effects** : Avoid release to open bodies of water.

### 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 D.O.T.
- 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** : Adhesives, Adjuvants, Spreaders or Stickers, N.O.I. (NMFC Item 42652, Class 60)



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### 15. Regulatory Information

National Fire Protection :  
Association Rating

Health: 2 Fire: 1 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 N  
Pressure:  
Fire: N  
Reactive: N

### 16. Other Information

Data of Preparation/Revision : 17-September-2019