

Report Date 29-Aug-17

Page 1 of 4

1. Identification

| Product Name | : FIRM UP |
|---------------------------------|--|
| Synonyms | : None |
| Product Use | : Penetrant/Wetter |
| 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 | : Danger |
|-----------------------|---|
| Skin Irritation | : Causes skin irritation |
| Eye Irritation | : Causes serious eye damage |
| Acute Toxicity Oral | : LD50 >5,000 mg/kg (Acute Toxicity Estimate) |
| Acute Toxicity Dermal | : No LD50 data available |
| | |
| | |
| Hazard Categories | : Eye/Skin Irritation-1/2 |
| Hazard Categories | : Eye/Skin Irritation-1/2 |
| 0 | : Causes serious eye damage |
| 0 | |

| Component | CAS Number | Weight % |
|--------------------------|--------------|----------|
| Alkoxylated alkyl ethers | Proprietary | 18 |
| Polycarboxylic acids | Proprietary | 7 |
| Inerts | Nonhazardous | 75 |
| First Aid Measures | | |

| а |
|----|
| |
| าร |
| lf |
| |
| 1 |

5. Fire Fighting Measures

Extinguishing Media : Not flammable; use extinguishing media suitable for underlying cause of fire. Do not use high volume water jet.



Report Date 29-Aug-17

Page 2 of 4

| Specific Hazards Arising from the Chemical | : Do not allow run-off from fire fighting to enter drains or water courses. |
|---|--|
| Special Fire Fight Proc | : Wear self-contained breathing apparatus and full protective clothing. Collect contaminated fire extinguishing water separately. This water must not be discharged into drains. Dispose of fire residues and contaminated fire fighting water properly. |

| 6. Accidental Release Measure | |
|--|--|
| 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 | : Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. Inform authorities if product contaminates rivers, lakes or drains. |
| Methods and Materials for Containment and Cleanup | : Soak up with inert absorbent material (e.g., sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable closed containers for disposal. |

| 7. Handling and Storage | |
|-------------------------------|---|
| Precautions for Safe Handling | : Do not breathe vapors or dust. Avoid contact with skin and eyes. Smoking, eating, and drinking should be prohibited in the application area. To avoid spills |
| | during handling, keep bottle on a metal tray. Dispose of rinse water in accordance with local and national regulations. |
| Conditions for Safe Storage | : Keep container tightly closed in a dry and well-ventilated place. Electrical installations and working materials must comply with technological safety standards. |

8. Exposure Controls / Personal Protection

| TLV/PEL | : Potassium Hydroxide: TLV=2 mg/m3; PEL=2 mg/m3. |
|----------------------------------|---|
| Appropriate Engineering Controls | : General and/or local exhaust should be sufficient. |
| 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

| Flash Point, ^o F Boiling Point, ^o F Melting Point(Freezing point), ^o C Vapor Pressure, mm Hg @ 20 ^o C Vapor Density Solubility in Water | No information found Not applicable, formulated mixture. 1.0607 (25 Deg. C.) |
|--|--|
| 1) | |
| Octanol/Water Partition Coefficient | : No information found |
| pH Flammable Limits (approximate volume % in air) | : 4 to 5 : No information found |



Page 3 of 4

Auto-ignition Temperature : No information found Decomposition temperature : No information found

10. Stability and Reactivity

| Reactivity | : Not reactive |
|--------------------------|------------------------|
| Chemical Stability | : Stable |
| Hazardous Decomposition | : No information found |
| Products | |
| Hazardous Polymerization | : Will not occur |
| Conditions to Avoid | : No data available |
| Incompatible Materials | : No information found |

11. Toxicological Information

| Acute Toxicity (Oral LD50) | : >5,000 mg/kg (rat) (Acute Toxicity Estimate). Not classified as hazardous under 29 CFR 1910.1200. |
|--------------------------------|--|
| Acute Toxicity (Dermal LD50) | : No LD50 data available. Not classified as hazardous under 29 CFR 1910.1200 (2012). |
| Acute Toxicity Inhalation LC50 | : No LC50 data available. Not classified as hazardous under 29 CFR 1910.1200 (2012). |
| Likely Routes of Exposure | : Eyes, skin |
| Skin Irritation | : Causes skin irritation. |
| Eye Irritation | : Causes serious eye damage. |
| Skin Sensitization | : Not classified based on available information. |
| Carcinogenic | : No component present at levels equal to or greater than 0.1% identified as human carcinogen. |
| Chronic Effects | : Not classified with chronic toxicity based on available information. |
| Other Hazards | : Not classified due to neurotoxicity, mutagenicity, reproductive toxicity or developmental toxicity based on available information. |

12. Ecological Information

| Ecotoxicity | : No data available |
|----------------------------------|---------------------|
| Persistence and Degradability | : No data available |
| Bioaccumulative Potential | : No data available |
| Mobility in Soil | : No data available |
| Other Adverse Effects | : No data available |

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. |
|--------------------------|---------------------------------------|
| Transport Hazard Class | : None |
| UN Identification Number | : None |
| Packaging Group | : None |
| Environmental Hazards | : No information found |

| HELENA | Safety | Data She | et | Report Date | 29-Aug-17 | |
|---|--|-----------------|----------------------|-----------------|------------------------|--|
| | | | | Page | 4 of 4 | |
| Special Precautions for Transportation | No information found No information found Adhesives, Adjuvants, 60) | Spreaders or St | ickers, N.O.I. (NMFC | C Item 42652, (| Class | |
| 15. Regulatory Information | | | | | | |
| National Fire Protection Association Rating | : Health: | 2 | Fire: 0 | Reactiv | itter 0 | |
| S.A.R.A Title III Hazard Classification (Yes/No) | : | — | | | , 1-Slight, 0-Minimum) | |
| | Immediate(Acute) Health: Y Delayed (Chronic) Health: N Sudden Release of N Pressure: Fire: N Reactive: N | | | | | |

16. Other Information

Data of Preparation/Revision : 29-August-2017