SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

- **Product name:** FLUID LOSS ADDITIVE
- **Product Description:** Coolant
- **Manufacturer:** Deep South Chemical, Inc.
  229 Millstone Road
  Broussard, LA 70518 (337) 837-9931
- **For Emergency:** Call CHEMTREC 1-800-424-9300 Outside the U.S.A. (703)-527-3887
- **Contact Person:** Glenn Ray
- **Formula:** Ethylene Glycol
- **MSDS Revised:** January 1, 2014

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>CAS Number</th>
<th>%</th>
<th>PEL(OSHA) TWA STEL</th>
<th>TLV(ACGIH) TWA STEL</th>
<th>IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol</td>
<td>107-21-1</td>
<td>90-99</td>
<td>100mg/m’(Ceiling)</td>
<td>100mg/m’(Ceiling)</td>
<td>N/E</td>
</tr>
</tbody>
</table>

SECTION 3. HAZARDS IDENTIFICATION, INCLUDING EMERGENCY OVERVIEW

- **Effects of overexposure**
  - **Inhalation:** This product may cause irritation to nose, throat, and respiratory tract
  - **Skin Contact:** This product may cause irritation to the skin. Defatting of the skin can occur with frequent or long-term skin contact.
  - **Eye Contact:** Irritation/tissue destruction develops immediately upon contact.
  - **Ingestion:** May be toxic if swallowed.

SECTION 4. FIRST AID MEASURES

- **Eyes:** Move victim away from exposure and into fresh air. If irritation persists, seek medical attention.
  - For direct exposure, flush with clean water for 15 minutes. Hold eyelids apart to ensure flushing of the entire eye surface.
- **Inhalation:** Move victim away from source of exposure and into fresh air. If irritation persists, seek medical attention. If victim is not breathing, artificial respiration should be administered.
- **Skin:** Remove contaminated clothes. Cleanse affected area thoroughly with soap and water. If irritation persists, seek medical attention. Wash contaminated clothing.
- **Ingestion:** Give large amounts of water and do not induce vomiting. Seek medical attention.

SECTION 5. FIRE FIGHTING MEASURES

- **Fire fighting measures**
  - **Extinguishing Media:** Use powder, foam, or CO₂. Do not use water jet(may spread fire).
  - **Decomposition/Combustion Products:** Oxides of carbon.
  - **Special Fire Fighting Procedures:** Water spray to cool drums.
- **Explosive Properties:**
  - LEL: N/D
  - UEL: N/D

SECTION 6. ACCIDENTAL RELEASE MEASURES

- **Steps to be taken if material is released or spilled:** Use proper personal protective equipment. Stay upwind and away from spill. Keep all sources of ignition and hot metal surfaces away from spill. If
spill is indoors, ventilate area. Keep out of drains, sewers or waterways. Use sand or other inert material to contain and soak up spill.

**Waste disposal method:** Dispose of according to local, state and federal regulations in an approved disposal facility or recycling facility.

### SECTION 7. HANDLING AND STORAGE

**Storage:** Store in a well-ventilated area. Keep container tightly closed when not in use. Store in cool, dry area. Keep away from sources of ignition.

**Handling:** Use proper personal protective equipment. Avoid contact with skin or eyes. Avoid breathing of vapors. Handle in well-ventilated workspace. When handling do not eat, drink, or smoke.

**Other precautions:** Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat, flame, sparks or other sources of ignition.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Ventilation:** Keep work area well ventilated.

**Protective clothing:** Impermeable gloves and impervious clothing as appropriate.

**Eye protection:** Chemical goggles where splashing may occur.

**Respiratory Protection:** Use appropriate respiratory protection when handling or in case of insufficient ventilation.

**Special Protection:** Safety shower, eye bath, and washing facilities should be available.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- **Specific gravity @ 75°F(H₂O = 1):** 1.11
- **Flash Point (PMCC Method) (°F):** >200
- **Vapor density (Air = 1):** 2.1
- **Solubility:** >10%
- **Vapor pressure @ 68°F:** 0.1mmHg
- **Evaporation Rate:** N/D
- **Appearance:** Green liquid.
- **Odor:** Mild
- **Boiling Point (°F):** 388
- **pH:** 6.5
- **Auto-ignition:** N/D

### SECTION 10. STABILITY AND REACTIVITY

**Stability and Reactivity:** Stable in normal conditions.

**Incompatible Materials:** Strong oxidizing agents and acids.

**Hazardous Decomposition Products:** Smoke, carbon oxides, and nitrogen.

**Hazardous Polymerization:** None described.

### SECTION 11. TOXICOLOGICAL INFORMATION

**Hazardous Ingredients:** Irritating to eyes and skin.

**Immediate Health Effects:** Irritation.

**Delayed Health Effects:** Defatting of skin with frequent or prolonged skin contact.

**Other:** Oral administration of ethylene glycol to pregnant experimental animals has been shown to cause birth defects in the offspring. These effects were not seen when the ethylene glycol was administered by dermal application or by inhalation. Continuous ingestion of a diet containing 1% or 2% ethylene glycol for two years produced liver and kidney damage, and bladder stones in rats.

### SECTION 12. ECOLOGICAL INFORMATION

**Persistence and Degradability:** All the components are biodegradable.

**Biodegradation:** 70-90% (28 days)

**ErC50 (72 hours) Skeletonema costatum:** N/D
LC50 (48 hours) Acartia tonsa: N/D
LC50 (10 days) Corophium voliotator: N/D
Aquatic Toxicity: 96 HR LC50 (mysid shrimp) N/D
Oil and grease content in slurry(Polymer 2 LB/BBL): N/D

SECTION 13. DISPOSAL CONSIDERATIONS
Disposal: If spilled, dispose according to local regulations. Recycle waste containers and clean out residues.

SECTION 14. TRANSPORT INFORMATION
DOT Transport Information: Ethylene Glycol Antifreeze
(Non-Regulated)

SECTION 15. REGULATORY INFORMATION
Toxic Substances Control Act (TCSA): All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

CERCLA RQ-40 CFR 302.4(a)
Component Ethylene Glycol
CERCLA RQ(lbs.) 1

SARA 302 Components-40 CFR 355 Appendix A
None

Section 311/312 Hazard Class-40 CFR 370.2
Immediate (X)
Delayed (X)
Fire ()
Reactive ()
Sudden Release of Pressure ()

SARA 313-40 CFR 372.65
Component Ethylene Glycol
CAS Number 107-21-1
% 94-98

SECTION 16. OTHER INFORMATION
NFPA RATING: Health (3) Fire (1) Reactivity (0)

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N/D= No data; N/A = Not available; N/E= Not established