MATERIAL SAFETY DATA SHEET

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

- **Product name:** TRIETHANOLAMINE-85% LFG
- **Product Description:** Alkanolamine
- **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
- **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</th>
<th>STEL</th>
<th>TLV(ACGIH) TWA</th>
<th>STEL</th>
<th>IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol, 2,2’2”-nitrilotris</td>
<td>102-71-6</td>
<td>65-80</td>
<td>N/E</td>
<td>N/E</td>
<td>5mg/m3</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>(common name:Triethanolamine)</td>
<td></td>
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</tr>
</tbody>
</table>

| Ethanol, 2,2’-iminnobis     | 111-42-2   | 10-20| 3ppm         | N/E  | 2mg/m3        | N/E    | N/E    |
| (common name:Diethanolamine) |

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 to eyes.
- **Ingestion:** There may be irritation of the mouth, throat, and digestive tract.

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:** Drink plenty water and induce vomiting. Seek medical attention.

SECTION 5. FIRE FIGHTING MEASURES

- **Fire fighting measures**
  - **Extinguishing Media:** Use dry chemical, water fog, foam, or CO₂. Do not use water jet(may spread fire).
  - **Decomposition/Combustion Products:** Toxic levels of ammonia, combustion products of nitrogen, carbon monoxide, carbon dioxide, irritating aldehydes and ketones may be formed on burning in a limited air supply.
  - **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 @ 60°F(H₂O = 1): 1.12
Flash Point (PMCC Method)(°F): >200
Vapor density (Air = 1): N/D
Solubility: >10% in water
Vapor pressure @ 68°F: 0.01mmHg
Evaporation Rate: N/D
Appearance: Clear liquid
Odor: Ammonia-like
Boiling Point (°F): N/D
Melting Point (°F): N/A
pH: 11
Auto-ignition (°F): N/D

SECTION 10. STABILITY AND REACTIVITY
Stability and Reactivity: Stable in normal conditions.
Incompatible Materials: Nitrites, acids, heat, and strong oxidizers.
Hazardous Decomposition Products: Toxic levels of ammonia, combustion products of nitrogen, carbon monoxide, carbon dioxide, irritating aldehydes and ketones may be formed on burning in a limited air supply.
Hazardous Polymerization: None described.
SECTION 11. TOXICOLOGICAL INFORMATION

Rat Oral LD50 = >2.5g/kg
Rat Inhalation LC50 = Believed to be practically non-toxic
Rabbit Dermal LD50 = >2g/kg

Standard Draize Testing:
Rabbit Skin = >0.5-8.0/8.0-Reaction: slightly irritating
Rabbit Eye = 25.0-50.0/110-Reaction: moderate

SECTION 12. ECOLOGICAL INFORMATION

Persistence and Degradability: N/D
Biodegradation: N/D
ErC50 (72 hours) Skeletonema costatum: N/D
LC50 (48 hours) Acartia tonsa: N/D
LC50 (10 days) Corophium voliotator: N/D

Bioaccumulative Potential: 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: 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
None

SARA 302 Components-40 CFR 355 Appendix A
None

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

SARA 313-40 CFR 372.65

Component
CAS Number
Methanol
67-56-1
35

SECTION 16. OTHER INFORMATION

NFPA RATING:
Health (1) Fire (1) Reactivity ( )

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