1. Identification

- **Product Name**: INDUCE
- **Synonyms**: None
- **Product Use**: Nonionic Low Foam Wetter/Spreader Adjuvant
- **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**: Moderately irritating
- **Eye Irritation**: Severely irritating in non-washed eye (35.8); moderately irritating in washed eye (16.3); Injury was reversible.
- **Acute Toxicity Oral**: LD50 >4,000 mg/kg (rat)
- **Acute Toxicity Dermal**: LD50 >2,000 mg/kg (rat)
- **Hazard Categories**: Oral/Dermal/Inhalation Toxicity - 5/5/5; Eye Irritation - 2A; Skin Irritation - 2
- **Hazard Statement**: May be harmful if swallowed
  May be harmful in contact with skin
  Causes serious eye irritation
  Causes skin irritation
  May be harmful if inhaled

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Number</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkyl Aryl Polyoxylkane ethers, alkanolamides, dimethyl siloxane, and free fatty acids. Components ineffective as adjuvant.</td>
<td>Proprietary</td>
<td>90.00</td>
</tr>
<tr>
<td>Nonhazardous</td>
<td></td>
<td>10.00</td>
</tr>
</tbody>
</table>

4. First Aid Measures

- **Eye**: Immediately flush eyes with water for at least 15 minutes. See a physician.
- **Skin**: Remove contaminated clothing and wash skin with soap and water. Call a physician if irritation persists.
- **Inhalation**: Move victim to fresh air. Give artificial respiration if needed. See a physician.
- **Ingestion**: Give a large amount of water to drink, induce vomiting and immediately call a physician. Do not induce vomiting or give anything by mouth to an unconscious person.

**Indication of Immediate Medical Attention and Special Treatment Needed**: If contact is made with the spray solution containing pesticides, refer to the "Statement of Practical Treatment/First Aid" on the pesticide label(s). Otherwise, treat symptomatically.

5. Fire Fighting Measures

- **Extinguishing Media**: Use dry chemical, water spray, water fog, carbon dioxide, foam, or sand/earth.
Specific Hazards Arising from the Chemical

- Water spray be ineffective. Cool fire-exposed containers with water. Fog nozzles are preferable. Closed containers may rupture or explode when exposed to extreme heat.
- Wear self-contained breathing apparatus and full protective clothing.

6. Accidental Release Measures

- **Personal Precautions**
  - Keep unprotected and unnecessary personnel out of spill area.

- **Protective Equipment**
  - Splashproof goggles or face shield, chemical-resistant gloves, impervious apron and footwear. Eyewash should be available in work area. Use NIOSH-approved respirator with organic vapor cartridge if PEL exceeded.

- **Emergency Procedures**
  - Prevent spreading of spilled material into any waterways, drains or sewers.
  - Absorb with an inert material such as sand, soil or vermiculite. Sweep up and dispose of in accordance with Federal, State and Local regulations.

7. Handling and Storage

- **Precautions for Safe Handling**
  - Keep out of reach of children. Keep container tightly closed. Do not contaminate water sources by runoff from cleaning of equipment, disposal of equipment wash waters or spray waste.

- **Conditions for Safe Storage**
  - Do not store with food, feed or other material to be used or consumed by humans or animals. Store in original container only. Do not allow water to be introduced into the contents of this container.

8. Exposure Controls / Personal Protection

- **TLV/PEL**
  - PEL 100 mg/m3.

- **Appropriate Engineering Controls**
  - Mechanical exhaust system

- **Personal Protective Equipment**
  - Splashproof goggles or face shield, chemical-resistant gloves, impervious apron and footwear. Eyewash should be available in work area. Use NIOSH-approved respirator with organic vapor cartridge if PEL exceeded.

9. Physical and Chemical Properties

- **Odor/Appearance**
  - Clear-slightly hazy colorless to yellow liquid.

- **Flash Point, °F**
  - >200 Degrees F.

- **Boiling Point, °F**
  - >250 Degrees F.

- **Melting Point(Freezing point), °C**
  - Not applicable

- **Vapor Pressure, mm Hg @ 20 °C**
  - Not established

- **Vapor Density**
  - 2.1

- **Solubility in Water**
  - Dispersible

- **Molecular Formula**
  - Not applicable, formulated mixture.

- **Density, g/mL @ 25 °C**
  - 0.956-1.033

- **Evaporation Rate(Butyl Acetate = 1)**
  - Not applicable

- **Octanol/Water Partition Coefficient**
  - pH: 4-5.0

- **Flammable Limits (approximate volume % in air)**
  - No information found

- **Auto-ignition Temperature**
  - >750 Degrees F.

- **Decomposition temperature**
  - No information found
10. Stability and Reactivity

**Reactivity**: No information found

**Chemical Stability**: Stable

**Hazardous Decomposition Products**: Carbon monoxide and carbon dioxide under fire conditions.

**Hazardous Polymerization Conditions to Avoid**: Will not occur

**Incompatible Materials**: Do not mix with strong oxidizers such as hydrogen peroxide, bromine and chromic acid.

11. Toxicological Information

**Acute Toxicity (Oral LD50)**: >4,000 mg/kg (rat)

**Acute Toxicity (Dermal LD50)**: >2,000 mg/kg (rat)

**Acute Toxicity Inhalation LC50**: 2.02 mg/L (vapor limit)

**Likely Routes of Exposure**:
- **Skin Irritation**: Moderately irritating.
- **Eye Irritation**: Severely irritating in non-washed eyes (35.8), moderately irritating in washed eyes (16.3). Injury was reversible.
- **Skin Sensitization**: Not listed as a sensitizer.
- **Carcinogenic**: Not listed by IARC, NTP or OSHA.
- **Chronic Effects**: None currently known.
- **Other Hazards**: May contain components which, in laboratory tests, have been toxic to the fetus only at doses toxic to the mother.

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**: Contains Alcohol C-12-C-16 Poly (1-6) Ethoxylate - a marine pollutant.

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 in non-bulk packages. Regulated in bulk or if shipped by air (IATA) or vessel (IMDG) as Environmentally Hazardous Substance, Liquid, n.o.s., (Alcohol C12-C16 Poly (1-6) Ethoxylate)

**Transport Hazard Class**: Class 9 (bulk/IATA/IMDG)

**UN Identification Number**: 3082(bulk/IATA/IMDG)

**Packaging Group**: PG III (bulk/IATA/IMDG)

**Environmental Hazards**: Marine Pollutant

**Transport in Bulk**: Marine Pollutant

**Special Precautions for Transportation**: No information found
15. Regulatory Information

National Fire Protection Association Rating

<table>
<thead>
<tr>
<th>Health:</th>
<th>1</th>
<th>Fire:</th>
<th>1</th>
<th>Reactivity:</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rating Level:</td>
<td>(4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)</td>
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</tbody>
</table>

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

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

16. Other Information

Data of Preparation/Revision : 04-August-2015