SAFETY DATA SHEET

Z-93 FOOD GRADE DEFOAMER

Revision Date: 10 April 2018

1) IDENTIFICATION

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>Z-93 FOOD GRADE DEFOAMER</th>
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</thead>
<tbody>
<tr>
<td>IDENTIFICATION NUMBER</td>
<td>FD030</td>
</tr>
<tr>
<td>PRODUCT USE/CLASS</td>
<td>DEFOAMER</td>
</tr>
<tr>
<td>CAS NUMBER</td>
<td>NA</td>
</tr>
</tbody>
</table>

SUPPLIER:
Anderson Chemical Company
325 South Davis Ave.
Litchfield, MN 55355
Phone: (320)693-2477

Emergency telephone: 1-800-424-9300
(CHEMTREC) 24 Hours day / 7 Days week

2) HAZARDS

Classification: Product is classified as hazardous under GHS criteria or OSHA Hazard Communication Standard (29 CFR 1910.1200) ASPIRATION HAZARD Category 2A

GHS Label Elements:

Symbol(s):

Signal Word(s): Danger

Hazard statement(s):
H332 Harmful if inhaled
H304 May be fatal if swallowed and enters airways.

Precautionary statement(s):
Prevention:
P102 Keep out of the reach of children
P202 Do not handle until all safety precautions have been read and understood
P261 Avoid breathing dust/fume/gas/mist/vapor/spray
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:  
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin  
P314 Get medical advice/attention if you feel unwell.

Storage:  
P402+P404 Store in a dry place. Store in a closed container.

Disposal:  
P501 Dispose of contents/container according to all applicable Local/State/Federal regulations.

Other Hazards:  
See Section 11 for health effects. See Section 12 for environmental effects.

### 3) COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>COMPONENT NAME</th>
<th>CAS NUMBER</th>
<th>Concentration (% by wt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Mineral Oil</td>
<td>8042-47-5</td>
<td>39-51 %</td>
</tr>
<tr>
<td>Proprietary Blend</td>
<td>Mixed</td>
<td>51-39 %</td>
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</tbody>
</table>

Other Comments:  
This product does contain a hazardous ingredient as defined by OSHA regulations.

### 4) FIRST AID MEASURES

First aid measures:  
- **Eye:** Immediately flush eyes with plenty of water. If irritation persists, seek medical attention.
- **Skin:** Wash with soap and water. If irritation develops or persists, seek medical attention.
- **Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.
- **Oral:** If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Most important symptoms/effects:  

Notes to physician:  
No hazards which require special first aid measures.

### 5) FIRE FIGHTING MEASURES

- **Flammability assessment:** None expected
- **Unsuitable extinguishing media:** DO NOT use water or water spray on fires involving this product.
- **Specific firefighting measures:** CO2, DRY CHEMICAL, FOAM
- **Specific hazards during firefighting:** Can produce CO2, CO, and acrid smoke
Special protective equipment and precautions for firefighters:
As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear.

6) ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
Absorb with sand, etc. and dispose as dry waste in accordance with all applicable regulations. Absorb small spill with inert material (dry sand or earth), then place in a chemical waste container. For large spills, dike for later disposal.

Methods and materials for containment and cleaning up:
Absorb small spill with inert material (dry sand or earth), then place in a chemical waste container.

Dispose of all contaminated materials is accordance with all Local, State and Federal regulations.

Do not discharge into soil, ground water, waterways or sewer systems.

7) HANDLING AND STORAGE

Precautions for safe handling:
Wear proper PPE when handling this product. Wash thoroughly after handling.

Conditions for safe storage:
Keep away from heat, sparks and flame. Keep container closed in a dry, cool place when not in use.

8) EXPOSURE CONTROLS/PERSOAL PROTECTION

| EXPOSURE LIMITS |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| Component       | CAS #           | OSHA PEL        | ACGIH TLV       | NIOSH REL       |
| White mineral oil| 8042-47-5       | 5 mg/m³         | 5 mg/m³         | 10 mg/m³        |

Engineering Controls:

- Local Ventilation: Good general ventilation should be sufficient to control any airborne levels.

Personal Protective Equipment for Routine Handling and Spills:

- Eyes: Wear safety glasses, goggles or face shield where splash hazard.

- Skin: The glove(s) listed below may provide protection against permeation. Gloves of other chemically resistant materials may not provide protection against permeation.

- Suitable Gloves: (Neoprene, Latex, Rubber)

- Inhalation/Suitable Respirator: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal / provincial requirements must be followed whenever
workplace conditions warrant respirator use. In most cases an N95 particulate respirator is sufficient.

Precautionary Measures: Wash hands before eating. Remove contaminated clothing and wash before reuse.

9) PHYSICAL AND CHEMICAL PROPERTIES

Flash Point: 360 F
Flammability Limits in Air: Lower NA  Upper Limit NA
Auto-ignition Temperature: 549-662 F
Decomposition Temperature: ND
Flammability: Combustible
Appearance: Cream colored opaque liquid
Odor: Mild Petroleum
Odor Threshold: ND
pH (100 % @ 25°C): Neutral
Melting/Freezing Point: ND
Boiling Point: ND
Evaporation Rate: Is slower than ether
Viscosity @ 25°C: 900-1500 cPs
Volatile Organic %: ND
Vapor Pressure: <0.0001 mm Hg @ 20 C
Vapor Density (Air=): Is heavier than air
Bulk Density @ 25°C: NA
Relative Density @ 25°C: 0.89 (approx.)
Solubility in Water: Dispersible
Partition Coefficient (n-octanol/water): ND

The Physical data presented here are representative values, as the actual product’s values may vary slightly.

10) STABILITY AND REACTIVITY

Reactivity: None known
Chemical stability: Stable
Possibility of hazardous reactions: None known
Conditions to avoid: Strong oxidizers
Incompatible materials: Strong oxidizers
Hazardous decomposition products: Carbon monoxide, carbon dioxide, formaldehyde

11) TOXICOLOGICAL INFORMATION
### Acute Toxicity: (Literature for Paraffin oil)

- **Oral:** \( \text{LD}_{50} 22 \, \text{gm/kg (non-toxic)} \) Mouse
- **Dermal:** \( 100 \, \text{mg/24 hr (Rabbit) mild} \)
- **Inhalation:** Information not available.
- **Skin corrosion/irritation:** Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).
- **Serious eye damage/irritation:** May cause eye irritation
- **Respiratory sensitization:** No hazard in normal industrial use.
- **Skin sensitization:** Not expected
- **Specific Target Organ Toxicity (single exposure):** Product does not meet criteria
- **Aspiration hazard:** Information not available

### Chronic Effects:

- **Germ cell mutagenicity:** Not determined
- **Carcinogenicity:** No components present at 0.1% or greater are classified as carcinogens by the NTP, IARC or OSHA.
- **Reproductive toxicity:** Not expected
- **Specific Target Organ Toxicity (repeated exposure):** None known

### Likely Routes of Exposure/Symptoms:

- **Eye:** Splash hazard
- **Skin:** Splash hazard
- **Inhalation:** Mists from operations
- **Oral:** Not expected

### Ecological Information

**Ecotoxicity:**

All acute aquatic toxicity studies on sample of base oils show acute toxicity values greater than 100 mg/L for invertebrates, algae and fish. These tests were carried out on water accommodated fractions and the results are...
consistent with the predicted aquatic toxicity of these substances based on their hydrocarbon composition. Classification: No classified hazards.

Persistence and degradability: The hydrocarbons in this material are not readily biodegradable, but since they can be degraded by microorganisms they are considered inherently biodegradable.  
Persistence per IOPC Fund definitions: Persistent

Bioaccumulative potential: Low Kow values measured for the hydrocarbon components of this material are greater than 5.3 and therefore regarded as having the potential to bioaccumulate. In practice, metabolic process may reduce bio concentration.

Mobility in soil: Not expected

Other adverse effects: None anticipated.

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### 13) DISPOSAL CONSIDERATIONS

**Disposal considerations:**

Dry with absorbent material and dispose as dry waste in accordance with all local, state and federal regulations. Do not dump into sewers, on the ground, or into any body of water.

**Empty container warnings:**

Dispose all empty containers in accordance with all local, state and federal regulations or by offering them to an approved and license recycler.

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### 14) TRANSPORT INFORMATION

**DOT Road Shipment Information (49 CFR 172.101):**

| UN Number: | Not regulated by DOT, IMDG, ICAO/IATA |
| DOT Proper Shipping Name: | Not regulated by DOT, IMDG, ICAO/IATA |
| DOT Technical Name: | Not regulated by DOT, IMDG, ICAO/IATA |
| DOT Hazard Class(es): | Not regulated by DOT, IMDG, ICAO/IATA |
| DOT Packing Group: | Not regulated by DOT, IMDG, ICAO/IATA |
| Marine Pollutant: | Not regulated by DOT, IMDG, ICAO/IATA |

**Air Shipment (IATA):** Not regulated by DOT, IMDG, ICAO/IATA

**Ocean Shipment (IMDG):** Not regulated by DOT, IMDG, ICAO/IATA

**Transport in bulk:** Not regulated by DOT, IMDG, ICAO/IATA

**Special precautions:** Not regulated by DOT, IMDG, ICAO/IATA

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### 15) REGULATORY INFORMATION

**International Chemical Inventory Status:**
USA (TSCA): All components of this product are listed.
CERCLA HAZARDS Product contains no listed components.
DSL All components of this product are listed.
EINECS: All components of this product are listed.
AICS: All components of this product are listed
Korea All components of this product are listed
China ND
Canada WHIMS Not a WHMIS controlled material
This SDS has been prepared in compliance with Controlled Product Regulations except for use of the 16 headings.

EPA SARA Title III Chemical Listings:

Section 302 Extremely Hazardous Substances:

<table>
<thead>
<tr>
<th>Component Name</th>
<th>CAS Number</th>
<th>wt %</th>
<th>Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
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Section 304 CERCLA Hazardous Substances:

<table>
<thead>
<tr>
<th>Component Name</th>
<th>CAS Number</th>
<th>wt%</th>
<th>Reportable Quantity (#)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
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</tbody>
</table>

Section 312 Hazard Class:

- Acute: ☐ Yes ☒ No
- Chronic: ☐ Yes ☒ No
- Fire: ☐ Yes ☒ No
- Pressure: ☐ Yes ☒ No
- Reactivity: ☐ Yes ☒ No

Section 313 Toxic Chemicals: Only chemicals which exceed the reporting threshold are included below:

<table>
<thead>
<tr>
<th>Component Name</th>
<th>CAS Number</th>
<th>wt%</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
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</tbody>
</table>

Other Regulatory Concerns:

State right to know:

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS Number</th>
<th>CA Prop 65</th>
<th>NJ</th>
<th>PA</th>
<th>MA</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
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16) OTHER INFORMATION

Revision date: 10 April 2018
Reason for change: New format
Revised by: MTJ
HMIS: 1 0 0

Note: HMIS ratings involve data and interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information in the SDS must be considered.

HMIS = Hazardous Material Information System

*Chronic effect

Disclaimer: This safety data sheet (SDS) was prepared in accordance with the 29 CFR 1910.1200. The information contained herein is based upon data available to us and reflects our best professional judgement. However, no warranty is expressed or implied regarding the accuracy of such information or the results obtained from the use thereof. We assume no legal responsibility whatsoever for any damage resulting from reliance upon this information since it is being furnished upon the condition that the person receiving it shall make his or her own determination of the suitability of the material described herein for a particular application, storage, or disposal situation.