1. IDENTIFICATION

Product Identifier

Product Name: Fluid Film® Liquid AR
Product Type: Grease, Corrosion inhibitor

Recommended use of the chemical and restrictions on use

Recommended Use: Corrosion inhibitor, lubricant
Uses advised against: No information available

Details of the supplier of the safety data sheet

Supplier Name: Eureka Chemical Company
Supplier Address: 234 Lawrence Ave
South San Francisco, CA 94080
US
Supplier Phone Number: Phone: 650-761-3536
Fax: 650-589-1943
Contact Phone: 1-650-761-3536
Supplier Email: info@fluid-film.com
Emergency telephone number: Chemtrec (800) 424-9300

2. HAZARDS IDENTIFICATION

Classification


GHS Label elements, including precautionary statements

None.

Emergency Overview

<table>
<thead>
<tr>
<th>Signal word</th>
<th>Hazard Statements</th>
<th>Appearance</th>
<th>Physical State</th>
<th>Odor</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
<td>Amber</td>
<td>Gel</td>
<td>Mild pine odor</td>
</tr>
</tbody>
</table>

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Precautionary Statements - Storage

No special requirements. Keep container tightly closed.

Precautionary Statements - Disposal

Product should be disposed of via authorized waste disposal contractors in accordance with all local and national regulations.
Hazards not otherwise classified (HNOC)
Not applicable.

Unknown Toxicity
No information available.

Other information
No information available.

Interactions with Other Chemicals
No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refined petroleum oil, hydrotreated heavy naphthenic</td>
<td>64742-52-5</td>
<td>50-90</td>
<td>*</td>
</tr>
<tr>
<td>Benzenesulfonic Acid, Di-C10-18-alkyl derivs., calcium salts</td>
<td>93820-57-6</td>
<td>1-10</td>
<td>*</td>
</tr>
<tr>
<td>Refined petroleum oil, hydrotreated heavy paraffinic</td>
<td>64742-54-7</td>
<td>1-10</td>
<td>*</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

First aid measures

General Advice
Immediate medical attention is required.

Eye Contact
Rinse thoroughly with plenty of water for at least 15 minutes, also under the eyelids. If symptoms persist, call a physician.

Skin Contact
Wipe excess material from the skin with a cloth, followed by washing with soap and water. A waterless skin cleanser is beneficial in removing the material from the skin. In the case of skin irritation or allergic reactions, see a physician.

Inhalation
If respiratory symptoms develop, remove to fresh air. If symptoms persist, call a physician.

Ingestion
Do NOT induce vomiting. Drink plenty of water. If symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed
No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician
Treat symptomatically.
5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
CO₂, Dry Chemical, Foam

Unsuitable Extinguishing Media
CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical
No information available.

Uniform Fire Code
Combustible. Will not readily ignite.

Hazardous Combustion Products
Carbon oxides.

Explosion Data
Sensitivity to Mechanical Impact
No.

Sensitivity to Static Discharge
No.

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

Personal Precautions
Avoid contact with eyes.

Other Information
Refer to protective measures listed in Sections 7 and 8.

Environmental Precautions

Environmental Precautions
Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for Containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling
Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage
Keep container tightly closed.

Incompatible Products
None known based on information supplied.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refined petroleum oil, hydrotreated heavy naphthenic</td>
<td>TWA: 5 mg/m³, as oil mist, mineral</td>
<td>TWA: 5 mg/m³, as oil mist, mineral</td>
<td></td>
</tr>
<tr>
<td>64742-52-5</td>
<td>STEL: TWA: 10 mg/m³, as oil mist, mineral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refined petroleum oil, hydrotreated heavy paraffinic</td>
<td>TWA: 5 mg/m³, as oil mist, mineral</td>
<td>TWA: 5 mg/m³, as oil mist, mineral</td>
<td></td>
</tr>
<tr>
<td>64742-54-7</td>
<td>STEL: TWA: 10 mg/m³, as oil mist, mineral</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value
OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits
NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines
Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992)

Appropriate engineering controls

Engineering Measures
- Showers
- Eyewash stations
- Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection
No special protective equipment required. Use chemical eye goggles in tanks and confined spaces.

Skin and Body Protection
Wear protective gloves and protective clothing.

Respiratory Protection
No protective equipment is needed under normal use conditions. Use approved respirator with organic vapor cartridges in tanks and confined spaces. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures
Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks/method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>8.5</td>
<td>None known</td>
</tr>
<tr>
<td>Melting / freezing point</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flash Point</td>
<td>157 °C / 315 °F</td>
<td>None known</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No data available</td>
<td>None known</td>
</tr>
</tbody>
</table>

Physical State
- Gel

Appearance
- Amber Gel

Color
- Amber

Odor
- Mild piney odor

Odor Threshold
- No information available
Specific Gravity
Water Solubility
Solubility in other solvents
Partition coefficient: n-octanol/water
Autoignition temperature
Decomposition temperature
Kinematic viscosity
Dynamic viscosity
Explosive properties
Oxidizing Properties
Specific Gravity
0.915
None known
Water Solubility
Insoluble in water
None known
Solubility in other solvents
No data available
None known
Partition coefficient: n-octanol/water
No data available
None known
Autoignition temperature
No data available
None known
Decomposition temperature
No data available
None known
Kinematic viscosity
No data available
None known
Dynamic viscosity
No data available
None known
Explosive properties
No data available
None known
Oxidizing Properties
No data available
None known

Other Information

Softening Point
VOC Content (%)
Particle Size
Particle Size Distribution
No data available
< 0.1% (CARB 310)
No data available
No data available

10. STABILITY AND REACTIVITY

Reactivity
No data available.

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Hazardous Polymerization
Hazardous polymerization does not occur.

Conditions to avoid
None known based on information supplied.

Incompatible materials
None known based on information supplied.

Hazardous Decomposition Products
Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information
Product does not present an acute toxicity hazard based on known or supplied information.

Inhalation
Specific test data for the substance or mixture is not available.

Eye Contact
Minimally irritating.

Skin Contact
Prolonged contact could cause skin irritation.

Ingestion
> 14,000 mg/kg

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium petroleum sulfonate</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>&gt; 4000 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>61789-86-4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Information on toxicological effects**

**Symptoms**  
No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization**  
No information available.

**Mutagenic Effects**  
No information available.

**Carcinogenicity**  
Contains no known carcinogens.

**Reproductive Toxicity**  
No information available.

**STOT - single exposure**  
No information available.

**STOT - repeated exposure**  
No information available.

**Chronic Toxicity**  
No information available.

**Target Organ Effects**  
No information available.

**Aspiration Hazard**  
No information available.

**Numerical measures of toxicity**  
Product Information

The following values are calculated based on chapter 3.1 of the GHS document

Not applicable

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**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**  
No information available.

**Persistence and Degradability**  
No information available.

**Bioaccumulation**  
No information available.

**Other adverse effects**  
No information available.

---

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Disposal methods**  
Product should be disposed of via authorized waste disposal contractors in accordance with all local and national regulations. Consult the appropriate state, regional, or local regulations for additional requirements.

**Contaminated Packaging**  
Dispose of contents/containers in accordance with local regulations.

**California Hazardous Waste Codes**  
Not applicable.

---

**14. TRANSPORT INFORMATION**
15. REGULATORY INFORMATION

International Inventories

TSCA
Complies

DSL
All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard
No
Chronic Health Hazard
No
Fire Hazard
No
Sudden release of pressure hazard
No
Reactive Hazard
No

SARA 302 Extremely Hazardous Substances (TPQ)
None

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

VOC Regulations
This product complies with the consumer product VOC limits of CARB, the US EPA and states adopting the OTC VOC rules.
US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

International Regulations

Canada
WHMIS Hazard Class
Not applicable.

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Physical Hazard</td>
</tr>
</tbody>
</table>

Chronic Hazard Star Legend  * = Chronic Health Hazard

Prepared By
Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

Revision Date
09-Mar-2017

Disclaimer
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End of Safety Data Sheet