1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier
Product name 80-691 OPEN GEAR & WIRE ROPE LUBE ULV

Recommended use of the chemical and restrictions on use.

Product code F02886
Product Type Extremely flammable aerosol
Synonyms None

Supplier's details

Recommended Use OPEN GEAR AND WIRE LUBRICANT.
Uses advised against No information available

Manufactured For:
Kimball Midwest
4800 Roberts Rd.
Columbus, OH 43228

Emergency telephone number
Chemical Emergency Phone Number Chemtrec 1-800-424-9300
Company Emergency Phone Number 800-233-1294
2. HAZARDS IDENTIFICATION

Classification

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2A</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Category 3</td>
</tr>
<tr>
<td>Aspiration toxicity</td>
<td>Category 1</td>
</tr>
<tr>
<td>Flammable aerosols</td>
<td>Category 1</td>
</tr>
<tr>
<td>Gases under pressure</td>
<td>Compressed Gas</td>
</tr>
</tbody>
</table>

GHS Label elements, including precautionary statements

Emergency Overview

DANGER

Hazard Statements
Causes skin irritation
Causes serious eye irritation
May cause drowsiness or dizziness
May be fatal if swallowed and enters airways
Extremely flammable aerosol
Contains gas under pressure; may explode if heated

Precautionary Statements - Prevention
Wash hands and face thoroughly after handling
Wear protective gloves/eye protection/face protection.
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Do not spray on an open flame or other ignition source
Pressurized container: Do not pierce or burn, even after use

Precautionary Statements - Response
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash it before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Do NOT induce vomiting
Precautionary Statements - Storage
Store locked up
Protect from sunlight. Store in a well-ventilated place
Do not expose to temperatures exceeding 122°F (50°C)
Keep container tightly closed.

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazard not otherwise classified (HNOC)
None

Other information
• Toxic to aquatic life with long lasting effects

0.78000737% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %*</th>
</tr>
</thead>
<tbody>
<tr>
<td>PETROLEUM OIL MIXTURE</td>
<td>MIXTURE</td>
<td>30-40</td>
</tr>
<tr>
<td>HEPTANE</td>
<td>64742-49-0</td>
<td>20-30</td>
</tr>
<tr>
<td>1,1-DIFLUOROETHANE</td>
<td>75-37-6</td>
<td>20-30</td>
</tr>
</tbody>
</table>

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

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice
Avoid contact with skin, eyes, and clothing. Avoid breathing, vapors, mist, or gas.

Eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin contact
Wash skin with soap and water. If skin irritation persists, call a physician.

Inhalation
Move to fresh air. If not breathing, give artificial respiration. If breathing has stopped, contact emergency medical services immediately.

Ingestion
Do NOT induce vomiting. Call a physician or Poison Control Center immediately. Never give anything by mouth to an unconscious person. Risk of product entering the lungs on vomiting after ingestion.

Most important symptoms/effects, acute and delayed
Main Symptoms
May cause skin irritation. Drowsiness. Dizziness. Difficulty breathing.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician
Treat symptomatically.

5. FIRE-FIGHTING MEASURES
**Suitable Extinguishing Media**

**Unsuitable Extinguishing Media** Do not use a solid water stream as it may scatter and spread fire.

**Specific hazards arising from the chemical**
Flammable or extremely flammable aerosol. Container may burst in fire.

**Explosion Data**
- Sensitivity to Static Discharge: Yes.

**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. Use shielding to protect fire-fighters from bursting containers.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions**
Ensure adequate ventilation.

**Environmental precautions**
Report spills as required by local and federal regulations.

**Methods and materials for containment and cleaning up**

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

**Methods for cleaning up**
Contain liquid and collect with an inter, non-combustible material.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on safe handling**
Avoid contact with eyes. Avoid breathing vapors or mists. Contents under pressure. Do not puncture or incinerate cans. Do not stick pin or any other sharp object into opening on top of can. Avoid skin contact. Use with adequate ventilation. Keep container away from heat, flames, and all other sources of ignition. Keep can away from all sources of electricity such as electric motors and batteries. Do not spray on hot surfaces.

**Conditions for safe storage, including any incompatibilities**

**Technical measures/Storage conditions**
Keep containers tightly closed in a cool, well-ventilated place.

**Incompatible products**
Store away from strong oxidizers and acids.

**Aerosol Level**
3

**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>PETROLEUM OIL MIXTURE</td>
<td>(inhalable) TWA : 5 mg/m³</td>
<td>TWA: 5 mg/m³</td>
<td>-</td>
</tr>
</tbody>
</table>
Other Exposure Guidelines
Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Exposure controls
Ventilation systems. Use adequate ventilation to keep the exposure levels below the OELs.

Individual protection measures, such as personal protective equipment

Eye/Face Protection
Safety glasses with side-shields.

Skin and body protection
Chemical resistant apron. Protective gloves.

Respiratory protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Aerosol</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>opaque</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>dark brown</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Solvent</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Boiling point/boling range</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>-50 °C / -58 °F</td>
<td>Based on propellant</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>upper flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>lower flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>upper flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>lower flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.844</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>Practically insoluble</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Viscosity</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Other information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VOC Content(%)</td>
<td>24.52</td>
<td></td>
</tr>
</tbody>
</table>
Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
None under normal processing.

Conditions to Avoid
Extremes of temperature and direct sunlight.

Incompatible Materials
Store away from strong oxidizers and acids.

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 information

Inhalation
Exposure to high vapour concentrations may cause nervous systems effects such as headache, nausea, and dizziness.

Eye contact
May cause slight irritation.

Skin contact
Irritating to skin. Prolonged skin contact may defat the skin and produce dermatitis.

Ingestion
Not acutely toxic. Aspiration into the lungs during swallowing may cause serious lung damage which may be fatal.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEPTANE 64742-49-0</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>&gt; 3160 mg/kg (Rabbit)</td>
<td>= 73680 ppm (Rat) 4 h</td>
</tr>
<tr>
<td>1,1-DIFLUOROETHANE 75-37-6</td>
<td>-</td>
<td>-</td>
<td>369,000 ppm (Mouse) 2 hour</td>
</tr>
</tbody>
</table>

Information on toxicological effects

Symptoms
Symptoms of overexposure may be headache, dizziness, tiredness, nausea, and vomiting. May cause mild irritation. Irritating to skin. Prolonged or repeated exposure may cause dermatitis. Not acutely toxic. Aspiration into the lungs during swallowing may cause serious lung damage which may be fatal.

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

| Skin corrosion/irritation | Irritating to skin. |
| Eye damage/irritation | Irritating to eyes. |
| Sensitization | No information available. |
| Germ Cell Mutagenicity | No information available. |
| Carcinogenicity | There are no known carcinogenic chemicals in this product. |
| Reproductive toxicity | The ingredients are not reproductive hazards. |
| Specific target organ systemic toxicity (single exposure) | May cause drowsiness and dizziness. |
| Specific target organ systemic toxicity (repeated exposure) | No information available. |
F02886 - 80-691 OPEN GEAR & WIRE ROPE LUBE
ULV

Revision Date 08-Dec-2014

Chronic toxicity
Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Chronic hydrocarbon abuse has been associated with irregular heart rhythms and potential cardiac arrest. Prolonged skin contact may defat the skin and produce dermatitis.

Aspiration hazard
May be fatal if swallowed and enters airways.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity
0.78000737% of the mixture consists of ingredient(s) of unknown toxicity
The following values are calculated based on chapter 3.1 of the GHS document.

ATEmix (oral) 882 mg/kg
ATEmix (dermal) 2397 mg/kg
ATEmix (inhalation-vapor) 102 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity
None known

Persistence and degradability
No information available.

Bioaccumulation
No information available.

Other adverse effects
No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment
Waste Disposal Methods Dispose of in accordance with federal, state, and local regulations.
Contaminated packaging Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT Ground CONSUMER COMMODITY ORM-D
or LIMITED QUANTITY

IATA UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD. QTY.
IMDG UN1950, AEROSOLS, 2.1, LTD. QTY.

15. REGULATORY INFORMATION

International Inventories
**Chemical Name** | **TSCA** | **DSL/NDSL** | **EINECS/ELINCS** | **ENCS** | **IECSC** | **KECL** | **PICCS** | **AICS**
--- | --- | --- | --- | --- | --- | --- | --- | ---
Heptane | | | | | | | | 
1,1-Difluoroethane | | | | | | | | 

**Legend:**
- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
- ENCS - Japan Existing and New Chemical Substances
- CHINA - China Inventory of Existing Chemical Substances
- KECL - Korean Existing and Evaluated Chemical Substances
- PICCS - Philippines Inventory of Chemicals and Chemical Substances
- AICS - Australian Inventory of Chemical Substances

**U.S. 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
- Chronic Health Hazard
- Fire Hazard
- Sudden Release of Pressure Hazard
- Reactive Hazard

Yes
Yes
Yes
Yes
No

**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.

**U.S. State Regulations**

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

**U.S. State Right-to-Know Regulations**

**Chemical Name** | **New Jersey** | **Massachusetts** | **Pennsylvania**
--- | --- | --- | ---
1,1-Difluoroethane | X | X | 

**EPA Pesticide Registration Number** Not applicable

**Canada**
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.
16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and chemical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>Personal protection B</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Physical Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

Prepared By: Regulatory Affairs
Issuing date: 08-Dec-2014
Revision Date: 08-Dec-2014
Revision Note: (M)SDS sections updated

Disclaimer
The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet