SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: Lubegard® Heavy Duty (HD) Water Soluble Cutting Oil
Product code: 80901, 80905, 80955

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the Substance/Mixture: Lubricant

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer
International Lubricants, Inc.
7930 Occidental Ave. S.
Seattle, WA 98108
Telephone (206) 762-5343
(800) 333-LUBE (5823)

1.4. Emergency telephone number

Emergency number with hours of operation: ChemTel (800)255-3924
24-hours a day /7 days a week /365 days a year
ChemTel (813)248-0585

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to United States OSHA 2012 HazCom

Hazard Class
Serious Eye Damage Category 1
Skin Irritant Category 2
Aspiration Toxicity Category 1

2.2. Label elements

Label elements according to United States OSHA 2012 HazCom

Hazard Pictograms

Signal Word: Danger

Hazard Statements
H304 – May be fatal if swallowed and enters airways
H315 – Causes skin irritation
H318 - Causes serious eye damage

Precautionary Statements

Prevention
P264 – Wash hands after handling
P280 - Wear protective gloves/protective clothing/eye protection/face protection

Response
P362 – Take off contaminated clothing and wash before reuse.
P301+P310 – IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P331: DO NOT induce vomiting

P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P332+P313 – If skin irritation occurs: Get medical advice/attention.

P305+P351+P338 - IF IN EYES: Wash cautiously for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

Storage
P405 – Store locked up

Disposal
P501 - Dispose of contents and container in accordance with all local, regional, national, and international regulations

2.3. Other hazards
No additional information available

2.4. Unknown acute toxicity
11% of the mixture consists of ingredient(s) of unknown acute toxicity

SECTION 3: Composition/information on ingredients

3.1. Substance
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS Number</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic</td>
<td>64742-52-5</td>
<td>65 - 85</td>
</tr>
<tr>
<td>Benzene, mono-C10-13-alkyl derivs., fractionation bottoms, heavy ends, sulfonated, sodium salts</td>
<td>148520-82-5</td>
<td>5 – 10</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>102-71-6</td>
<td>1 – 5</td>
</tr>
<tr>
<td>4-(2-nitrobutyl)-Morpholine</td>
<td>2224-44-4</td>
<td>0.5 – 1.5</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. Call a physician if irritation develops and persists.

First-aid measures after eye contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention immediately.

First-aid measures after ingestion: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Seek medical attention/advice if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation: May cause respiratory tract irritation.

Symptoms/injuries after skin contact: Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause an allergic skin reaction.

Symptoms/injuries after eye contact: Causes serious eye damage. Symptoms may include discomfort or pain, excessive blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.

Symptoms/injuries after ingestion: May be fatal if swallowed and enters airways. May cause stomach distress, nausea, or vomiting. This product may be aspirated into the lungs and cause chemical pneumonitis.

4.3. Indication of any immediate medical attention and special treatment needed
Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).
**SECTION 5: Firefighting measures**

5.1. Extinguishing Media

Suitable Extinguishing Media: Water spray, dry chemical, foam, carbon dioxide.

Unsuitable Extinguishing Media: None known.

5.2. Special Hazards Arising from the Chemical

Fire Hazard: May include, but are not limited to oxides of carbon, oxides of sulfur, oxides of nitrogen.

5.4. Special Protective Equipment and Precautions for Fire Fighters

Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

**SECTION 6: Accidental release measures**

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.1.2. For emergency responders: No additional information available.

6.2. Methods and material for containment and cleaning up

For containment: Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow the material to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up: Vacuum or sweep material and place in a disposal container. Provide ventilation.

**SECTION 7: Handling and storage**

7.1. Precautions for safe handling

Precautions for safe handling: Avoid contact with skin and eyes. Do not swallow. Open and handle container with care. When using do not eat, drink or smoke. Do not breathe gas/fumes/vapor/spray. (See Section 8)

General hygiene advice: Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep out of the reach of children. Keep container tightly closed. Store in a cool, dry, well ventilated place away from incompatible materials. (See Section 10).

7.3. Specific End use(s)

Not available.

**SECTION 8: Exposure controls/personal protection**

8.1. Control parameters

**Exposure Guidelines**

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>OSHA-PEL</th>
<th>ACGIH-TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic</td>
<td>5 mg/m³</td>
<td>5 mg/m³</td>
</tr>
<tr>
<td>Benzene, mono-C10-13-alkyl derivs., fractionation bottoms, heavy ends, sulfonated, sodium salts</td>
<td>Not available</td>
<td>Not available</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>Not available</td>
<td>5 mg/m³</td>
</tr>
<tr>
<td>4-(2-nitrobutyl)-Morpholine</td>
<td>Not available</td>
<td>Not available</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
Lubegard® Heavy Duty (HD) Water Soluble Cutting Oil
Safety Data Sheet
Conforms to United States Regulation 2012 OSHA HazCom

8.3. Individual Protective Measures

<table>
<thead>
<tr>
<th>Personal Protective Equipment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand protection</td>
<td>Wear chemical resistance protective gloves.</td>
</tr>
<tr>
<td>Eye protection</td>
<td>Wear approved eye protection.</td>
</tr>
<tr>
<td>Skin and body protection</td>
<td>Wear suitable protective clothing.</td>
</tr>
<tr>
<td>Respiratory protection</td>
<td>In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product, and the safe working limits of the selected respirator.</td>
</tr>
<tr>
<td>General health and safety measures</td>
<td>Handle according to established industrial hygiene and safety practices.</td>
</tr>
</tbody>
</table>

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance, physical state and color</td>
<td>Clear brown-colored liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Oily</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point / Freezing Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Initial boiling point / Boiling range</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>~ 154.4°C (~ 309.9°F)</td>
</tr>
<tr>
<td>Relative evaporation rate</td>
<td>Negligible</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Lower flammable / Explosive limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper flammable / Explosive limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>1 mm Hg</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.92</td>
</tr>
<tr>
<td>Solubility</td>
<td>Complete</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>~ 260°C (~ 500°F)</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>46 cSt @ 40°C</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

SECTION 10: Stability and reactivity

10.1. Reactivity
No dangerous reaction known under conditions of normal use.

10.2. Chemical stability
Stable under normal storage conditions.

10.3. Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid
Heat. Incompatible materials.

10.5. Incompatible materials
Strong oxidizers

10.6. Hazardous decomposition products
May include, but are not limited to oxides of carbon, oxides of phosphorous sulfur dioxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Lubegard® Heavy Duty (HD) Water Soluble Cutting Oil
Safety Data Sheet
Conforms to United States Regulation 2012 OSHA HazCom

### Lubegard® Heavy Duty (HD) Water Soluble Cutting Oil

<table>
<thead>
<tr>
<th>LD50 oral rat</th>
<th>No data available</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 dermal rabbit</td>
<td>No data available</td>
</tr>
<tr>
<td>LC50 inhalation rat</td>
<td>No data available</td>
</tr>
</tbody>
</table>

### Distillates (petroleum), hydrotreated heavy naphthenic (64742-52-5)

<table>
<thead>
<tr>
<th>LD50 oral rat</th>
<th>No data available</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 dermal rabbit</td>
<td>No data available</td>
</tr>
<tr>
<td>LC50 inhalation rat</td>
<td>No data available</td>
</tr>
</tbody>
</table>

### Benzene, mono-C10-13-alkyl derivs., fractionation bottoms, heavy ends, sulfonated, sodium salts (148520-82-5)

<table>
<thead>
<tr>
<th>LD50 oral rat</th>
<th>&gt;5000 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt;2000 mg/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat</td>
<td>2.18 mg/liter, 4 hours</td>
</tr>
</tbody>
</table>

### Triethanolamine (102-71-6)

<table>
<thead>
<tr>
<th>LD50 oral rat</th>
<th>4190 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt;20 mL/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat</td>
<td>No data available</td>
</tr>
</tbody>
</table>

### 4-(2-nitrobutyl)-Morpholine (2224-44-4)

<table>
<thead>
<tr>
<th>LD50 oral rat</th>
<th>625 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 dermal rabbit</td>
<td>420 mg/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat</td>
<td>No data available</td>
</tr>
</tbody>
</table>

### Ingredient

<table>
<thead>
<tr>
<th>Chemical Listed as a Carcinogen or Potential Carcinogen (NTP, IARC, OSHA, ACGIH, Prop 65) (See Section 15 for more information)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic</td>
</tr>
<tr>
<td>Benzene, mono-C10-13-alkyl derivs., fractionation bottoms, heavy ends, sulfonated, sodium salts</td>
</tr>
<tr>
<td>Triethanolamine</td>
</tr>
<tr>
<td>4-(2-nitrobutyl)-Morpholine</td>
</tr>
</tbody>
</table>

### Skin Corrosion/Irritation:
Causes skin irritation.

### Serious Eye Damage/Irritation:
Causes serious eye damage.

### Respiratory or Skin Sensitization:
May cause an allergic skin reaction.

### Germ Cell Mutagenicity:
Based on available data, the classification criteria are not met.

### Carcinogenicity:
Based on available data, the classification criteria are not met.

### Reproductive Toxicity:
Based on available data, the classification criteria are not met.

### Specific Target Organ Toxicity - Single Exposure:
Based on available data, the classification criteria are not met.

### Specific Target Organ Toxicity - Repeated Exposure:
Based on available data, the classification criteria are not met.

### Aspiration Hazard:
May cause respiratory tract irritation.

### Symptoms/injuries after inhalation:
Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause an allergic skin reaction.

### Symptoms/injuries after skin contact:
Causes serious eye damage. Symptoms may include discomfort or pain, excessive blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.

### Symptoms/injuries after eye contact:
May be fatal if swallowed and enters airways. May cause stomach distress, nausea, or vomiting. This product may be aspirated into the lungs and cause chemical pneumonitis.

### Symptoms/injuries after ingestion:
**SECTION 12: Ecological information**

12.1. Ecotoxicity
Acute/Chronic Toxicity May cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability
Persistence and degradability Not available

12.3. Bioaccumulative potential
Bioaccumulation Not available

12.4. Mobility in soil
Not available

12.5. Other adverse effects
Not available

**SECTION 13: Disposal considerations**

13.1. Waste treatment methods
Disposal Method: This material must be disposed of in accordance with all local, state, provincial, and federal regulations.

Other Disposal Recommendations: Not available.

**SECTION 14: Transport information**

In accordance with DOT

14.1 UN NUMBER
Not regulated

14.2 UN PROPER SHIPPING NAME
Not regulated

14.3 ADDITIONAL INFORMATION
Other information: No supplementary information available.

Special transport precautions: Do not handle until all safety precautions have been read and understood.

**SECTION 15: Regulatory information**

15.1. Safety, health and environmental regulations/legislation specific for the chemical


<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>Section 302 (EHS) TPQ (lbs.)</th>
<th>Section 304 EHS RQ (lbs.)</th>
<th>CERCLA RQ (lbs.)</th>
<th>Section 313</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Benzene, mono-C10-13-alkyl derivs., fractionation bottoms, heavy ends, sulfonated, sodium salts</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>4-(2-nitrobutyl)-Morpholine</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

**State Regulations**

California Proposition 65:
This product does not contain a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.
Lubegard® Heavy Duty (HD) Water Soluble Cutting Oil
Safety Data Sheet
Conforms to United States Regulation 2012 OSHA HazCom

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>USA TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic</td>
<td>Yes</td>
</tr>
<tr>
<td>Benzene, mono-C10-13-alkyl derivs., fractionation bottoms, heavy ends, sulfonated, sodium salts</td>
<td>Yes</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>Yes</td>
</tr>
<tr>
<td>4-(2-nitrobutyl)-Morpholine</td>
<td>No</td>
</tr>
</tbody>
</table>

NFPA - National Fire Protection Association

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>2</td>
</tr>
<tr>
<td>Fire</td>
<td>1</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
</tbody>
</table>

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

CP65 California Proposition 65
OSHA Occupational Safety and Health Administration.
ACGIH American Conference of Governmental Industrial Hygienists.
   A1 - Confirmed human carcinogen.
   A2 - Suspected human carcinogen.
   A3 - Animal carcinogen.
   A4 - Not classifiable as a human carcinogen.
   A5 - Not suspected as a human carcinogen.

IARC International Agency for Research on Cancer.
   1 - The agent (mixture) is carcinogenic to humans.
   2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.
   2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.
   3 - The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.
   4 - The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.

NTP National Toxicology Program.
   1 - Known to be carcinogens.
   2 - Reasonably anticipated to be carcinogens.

SECTION 16: Other information

Date of Preparation: May 28, 2015
Version: 2.0
Revision Date: August 6, 2018

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user’s responsibility to satisfy oneself as to the suitability and completeness of this information for the user’s own particular use.

Prepared by: International Lubricants, Inc.