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

1.1. Product identifier

Product name: Lubegard® Bio-Tech Engine Oil Protectant
Product code: 30901, 30902, 40902, 40904, 40905

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: Additive

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
Skin Sensitization, Category 1

2.2. Label elements

Label elements according to United States OSHA 2012 HazCom

Hazard Pictograms

Signal Word
Warning

Hazard Statements
H317 – May cause an allergic skin reaction

Precautionary Statements

Prevention
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P261 – Avoid breathing dust/fume/gas/mist/vapors/spray
P272 – Contaminated work clothing must not be allowed out of the workplace

Response
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P363 - Wash contaminated clothing before reuse
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention

Storage
Not applicable
Lubegard® Bio/Tech Engine Oil Protectant
Safety Data Sheet
Conforms to United States Regulation 2012 OSHA HazCom

Disposal

2.3. Other hazards
No additional information available

2.4. Unknown acute toxicity
78% 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>
<th>GHS – OSHA Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricating oils, refined, used</td>
<td>68476-77-7</td>
<td>40 – 70</td>
<td>Not classified</td>
</tr>
<tr>
<td>1-Decene, homopolymer, hydrogenated</td>
<td>68037-01-4</td>
<td>10 - 30</td>
<td>Aspiration Toxicant, Category 1</td>
</tr>
<tr>
<td>Butanedioic acid (4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl) thio-bis (2-ethylhexyl) ester</td>
<td>126104-53-8</td>
<td>1 – 5</td>
<td>Skin Sensitization, Category 1A</td>
</tr>
<tr>
<td>Diethanolamine</td>
<td>111-42-2</td>
<td>&lt;0.1</td>
<td>Acute Toxicity, Oral, Category 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Serious Eye Damage, Category 1</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>100-41-4</td>
<td>&lt;0.1</td>
<td>Flammable Liquids, Category 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Acute Toxicity Category 4, (Inhalation)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Carcinogen Category 2</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. If easy to do, remove contact lenses. If irritation persists, get medical attention.

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. Vapors may cause drowsiness or dizziness.

Symptoms/injuries after skin contact : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause sensitization by skin contact.

Symptoms/injuries after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excessive blinking and tear production.

Symptoms/injuries after ingestion : May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

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: Powder, foam, carbon dioxide.

Unsuitable Extinguishing Media: Water
5.2. **Special Hazards Arising from the Chemical**

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

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.

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. Keep away from food, drink and animal feedingstuffs.

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>Lubricating oils, refined, used</td>
<td>Not available</td>
<td>Not available</td>
</tr>
<tr>
<td>1-Decene, homopolymer, hydrogenated</td>
<td>Not available</td>
<td>Not available</td>
</tr>
<tr>
<td>Butanedioc acid (4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-y1) thio-bis (2-ethylhexyl) ester</td>
<td>Not available</td>
<td>Not available</td>
</tr>
<tr>
<td>Diethanolamine</td>
<td>Not available</td>
<td>Not available</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>100 ppm</td>
<td>20 ppm</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.

8.3. **Individual Protective Measures**

**Personal Protective Equipment**

<table>
<thead>
<tr>
<th>Protection Type</th>
<th>Protection Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand protection</td>
<td>Wear chemically resistant protective gloves.</td>
</tr>
<tr>
<td>Eye protection</td>
<td>Wear approved eye protection (properly fitted dust-proof or splash-proof chemical safety goggles) and face protection (face shield).</td>
</tr>
<tr>
<td>Skin and body protection</td>
<td>Wear suitable protective clothing.</td>
</tr>
</tbody>
</table>
Respiratory protection : 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.

General health and safety measures : Handle according to established industrial hygiene and safety practices.

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>Transparent, blue-colored liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Petroleum odor</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>213°C (416°F) ASTM D92</td>
</tr>
<tr>
<td>Relative evaporation rate</td>
<td>&lt; 1 (Water = 1)</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>&lt; 0.1 mm Hg @ 25°C (77°F)</td>
</tr>
<tr>
<td>Vapor density</td>
<td>&gt;1 (Air = 1)</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.87 g/cm³ @ 60°F</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>37 cSt @ 40°C</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
Oxidizers

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Lubegard® Bio/Tech Engine Oil Protectant</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>&gt;2000 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt;2000 mg/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat</td>
<td>No data available</td>
</tr>
</tbody>
</table>
**Lubegard® Bio/Tech Engine Oil Protectant**

**Safety Data Sheet**

Conforms to United States Regulation 2012 OSHA HazCom

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Chemical Listed as a Carcinogen or Potential Carcinogen (NTP, IARC, OSHA, ACGIH, Prop 65)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricating oils, refined, used</td>
<td>Not listed</td>
</tr>
<tr>
<td>1-Decene, homopolymer, hydrogenated</td>
<td>Not listed</td>
</tr>
<tr>
<td>Butanedioic acid (4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl) thio-bis (2-ethylhexyl) ester</td>
<td>Not listed</td>
</tr>
<tr>
<td>Diethanolamine</td>
<td>ACGIH Group A3, IARC Group 2B, Prop 65</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>ACGIH Group A3, IARC Group 2B, Prop 65</td>
</tr>
</tbody>
</table>

### LD50 and LC50 Values

<table>
<thead>
<tr>
<th>Chemical and Structure</th>
<th>LD50 oral rat</th>
<th>LD50 dermal rabbit</th>
<th>LC50 inhalation rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricating oils, refined, used</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>1-Decene, homopolymer, hydrogenated</td>
<td>&gt;5000 mg/kg</td>
<td>No data available</td>
<td>&gt;5.2 mg/L, 4 hours</td>
</tr>
<tr>
<td>Butanedioic acid (4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl) thio-bis (2-ethylhexyl) ester</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Diethanolamine</td>
<td>620 µL/Kg</td>
<td>7640 µL/Kg</td>
<td>No data available</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>3500 mg/kg</td>
<td>15,354 mg/kg</td>
<td>17.2 mg/L, 4 hours</td>
</tr>
</tbody>
</table>

### Skin Corrosion/Irritation:

- **Based on available data, the classification criteria are not met.**

### Serious Eye Damage/Irritation:

- **Based on available data, the classification criteria are not met.**

### 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:

- May cause skin irritation. Symptoms may include redness, drying, defatting, and cracking of the skin. May cause sensitization by skin contact.

### Symptoms/injuries after skin contact:

- May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness or swelling.

### Symptoms/injuries after eye contact:

- May be harmful if swallowed. May cause stomach distress, nausea, or vomiting.

05/02/2018
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>Lubricating oils, refined, used</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>1-Decene, homopolymer, hydrogenated</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Butanedioc acid (4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-y1) thio-bis (2-ethylhexyl) ester</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Diethanolamine</td>
<td>Not listed</td>
<td>Not listed</td>
<td>100</td>
<td>313</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>Not listed</td>
<td>Not listed</td>
<td>1000</td>
<td>313</td>
</tr>
</tbody>
</table>

State Regulations

California Proposition 65:
**WARNING:** This product can expose you to diethanolamine and ethylbenzene, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>USA TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricating oils, refined, used</td>
<td>Yes</td>
</tr>
<tr>
<td>1-Decene, homopolymer, hydrogenated</td>
<td>Yes</td>
</tr>
<tr>
<td>Butanediolic acid (4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl) thio-bis (2-ethylhexyl) ester</td>
<td>No</td>
</tr>
<tr>
<td>Diethanolamine</td>
<td>Yes</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**NFPA - National Fire Protection Association**

| Health: | 1 |
| Fire: | 1 |
| Reactivity: | 0 |

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

**HMIS – Hazardous Materials Identification System**

| Health: | 1 |
| Fire: | 1 |
| Reactivity: | 0 |

**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.
Lubegard® Bio/Tech Engine Oil Protectant
Safety Data Sheet
Conforms to United States Regulation 2012 OSHA HazCom

SECTION 16: Other information

Date of Preparation: March 5, 2015
Version: 1.1
Revision Date: July 19, 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.
Phone: (800)-333-5823
www.lubegard.com

End of Safety Data Sheet