



SAFETY DATA SHEET

Section 1: IDENTIFICATION

1.1 PRODUCT IDENTIFIER

Product Name: Lubegard® BioTech Engine Oil Protectant
Product Code: 30901, 30902, 40902, 40904, 40905

1.2 RECOMMENDED USE OF CHEMICAL AND RESTRICTIONS ON USE

Use: Additive.

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Name/Address: International Lubricants, Inc.
P.O. Box 24743, Seattle WA
98124-0743, USA
Telephone Number: (206) 762-5343
(800) 333-LUBE (5823)

1.4 EMERGENCY TELEPHONE NUMBER

Emergency Telephone Number: CHEM TEL (800) 255-3924
CHEM TEL (813) 248-0585

Section 2: HAZARD(S) IDENTIFICATION

2.1 CLASSIFICATION OF THE CHEMICAL ACCORDING TO OSHA HAZCOM 2012

Hazard class

Skin sensitization 1

2.2 LABEL ELEMENTS ACCORDING TO OSHA HAZCOM 2012

Hazard Pictogram:



Signal Word: Warning
Hazard Statement: May cause an allergic skin reaction.
Prevention: Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves.
Response: If on skin: Wash with plenty of water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
Storage: Not applicable.
Disposal: Dispose of contents and container in accordance with all local, regional, national and international regulations.

2.3 ADDITIONAL INFORMATION

Hazards not otherwise classified: Not applicable.
64 % of the mixture consists of ingredient(s) of unknown acute toxicity.



SAFETY DATA SHEET

WHMIS Classification(s):

Class D2B - Skin Sensitization

WHMIS Hazard Symbols:**WHMIS Signal Word:** WARNING**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1 MIXTURES**

Ingredient	CAS No	Wt. %
Lubricating oils, refined used	68476-77-7	40 - 70
1-Decene, homopolymer, hydrogenated	68037-01-4	10 - 30
Butanedioic acid, [(4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl)thio]-, bis(2-ethylhexyl) ester	126104-53-8	1 - 5
Ethylbenzene	100-41-4	< 0.1
Diethanolamine	111-42-2	< 0.1

The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

Section 4: FIRST- AID MEASURES**4.1 DESCRIPTION OF THE FIRST AID MEASURE**

- Eye:** In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.
- Skin:** In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
- 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.
- Ingestion:** If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

- Eye:** May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production.
- Skin:** May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause sensitization by skin contact.
- Inhalation:** May cause respiratory tract irritation. Vapors may cause drowsiness and dizziness.
- Ingestion:** May be harmful if swallowed. May cause stomach distress, nausea or vomiting.



SAFETY DATA SHEET

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENTS NEEDED

Note to Physicians: Symptoms may not appear immediately.

Specific Treatments: In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

Section 5: FIRE-FIGHTING MEASURES

5.1 FLAMMABILITY

Flammability: Not flammable by WHMIS/OSHA criteria.

5.2 EXTINGUISHING MEDIA

Suitable Extinguishing Media: Powder, foam, carbon dioxide.

Unsuitable Extinguishing Media: Water.

5.3 SPECIAL HAZARDS ARISING FROM THE CHEMICAL

Products of Combustion: May include, and are not limited to: oxides of carbon, oxides of phosphorous, oxides of sulfur.

Explosion Data:

Sensitivity to Mechanical Impact: Not available.

Sensitivity to Static Discharge: Not available.

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

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING - UP

Methods 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 to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for Cleaning-Up: Scoop up material and place in a disposal container.

Section 7: HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Handling: Avoid contact with skin and eyes. Do not swallow. Avoid breathing dust/fume/gas/mist/vapors/spray. Handle and open container with care. When using do not eat or drink. (See section 8)

General Hygiene Advice: Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.



SAFETY DATA SHEET

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage: Keep out of the reach of children. Keep container tightly closed. Do not store at temperatures above 49°C / 120°F. (See section 10)

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

Exposure Guidelines

Occupational Exposure Limits		
Ingredient	OSHA-PEL	ACGIH-TLV
Lubricating oils, refined used	Not available.	Not available.
1-Decene, homopolymer, hydrogenated	Not available.	Not available.
Butanedioic acid, [(4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl)thio]-, bis(2-ethylhexyl) ester	Not available.	Not available.
Ethylbenzene	100 ppm; 435 mg/m ³	20 ppm
Diethanolamine	Not available.	Not available.

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:

Eye/Face Protection: Safety glasses or goggles are recommended when using product.

Skin Protection:

Hand Protection: Wear chemically resistant protective gloves.

Body Protection: Wear suitable protective clothing.

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

Appearance: Clear.

Color: Blue.

Odor: Petroleum odor.

Odor Threshold: Not available.

Physical State: Liquid.

pH: Not available.

Melting Point/Freezing Point: Not available.



SAFETY DATA SHEET

Initial Boiling Point and Boiling Range:	Not available.
Flash Point (COC):	213 °C (416 °F)
Evaporation Rate:	< 1 (Water = 1)
Flammability:	Not flammable.
Lower Flammability/Explosive Limit:	Not available.
Upper Flammability/Explosive Limit:	Not available.
Vapor Pressure:	< 0.1 mmHg @ 25 °C (77 °F)
Vapor Density:	> 1 (Air = 1)
Relative Density/Specific Gravity:	0.877
Solubility:	Negligible.
Partition coefficient: n-octanol/water:	Not available.
Auto-ignition Temperature:	Not available.
Decomposition Temperature:	Not available.
Viscosity:	34.1 cSt @ 40 °C (104 °F)
Explosive Properties:	Not available.
Oxidizing Properties:	Not available.

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, and are not limited to: oxides of carbon, oxides of phosphorous, oxides of sulfur.

Section 11: TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

Likely Routes of Exposure: Skin contact, skin absorption, eye contact, inhalation, and ingestion.

Symptoms related to physical/chemical/toxicological characteristics:

Eye: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production.



SAFETY DATA SHEET

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

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

Inhalation: May cause respiratory tract irritation. Vapors may cause drowsiness and dizziness.

Acute Toxicity:

Ingredient	LC50	LD50
Lubricating oils, refined used	Not available.	Not available.
1-Decene, homopolymer, hydrogenated	Inhalation > 5.2 mg/L 4hr, rat	Oral > 5000 mg/kg, rat
Butanedioic acid, [(4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl)thio]-, bis(2-ethylhexyl) ester	Not available.	Not available.
Ethylbenzene	Inhalation 17.2 mg/L 4hr, rat	Oral 3500 mg/kg, rat Dermal 15400 mg/kg, rabbit
Diethanolamine	Not available.	Oral 620 µL/kg, rat Dermal 7640 µL/kg, rabbit

Calculated overall Chemical Acute Toxicity Values

LC50 (inhalation)	LD50 (oral)	LD50 (dermal)
Not available.	> 2000 mg/kg, rat	> 2000 mg/kg, rabbit

Ingredient	Chemical Listed as Carcinogen or Potential Carcinogen (NTP, IARC, OSHA, ACGIH, CP65)*
Lubricating oils, refined used	Not listed.
1-Decene, homopolymer, hydrogenated	Not listed.
Butanedioic acid, [(4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl)thio]-, bis(2-ethylhexyl) ester	Not listed.
Ethylbenzene	G-A3, I-2B, CP65
Diethanolamine	G-A3, I-2B, CP65

* See Section 15 for more information.

11.2 DELAYED, IMMEDIATE, AND CHRONIC EFFECTS OF SHORT- AND LONG-TERM EXPOSURE

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

Skin Sensitization: May cause an allergic skin reaction.

STOT-Single Exposure: Based on available data, the classification criteria are not met.

Chronic Health Effects:

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

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

Reproductive Toxicity:

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

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



SAFETY DATA SHEET

Embryotoxicity: Based on available data, the classification criteria are not met.
Fertility: Based on available data, the classification criteria are not met.
STOT-Repeated Exposure: Based on available data, the classification criteria are not met.
Aspiration Hazard: Based on available data, the classification criteria are not met.
Toxicologically Synergistic Materials: Not available.
Other Information: Not available.

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

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

14.1 UN NUMBER

DOT
Not regulated.

TDG
Not regulated.

14.2 UN PROPER SHIPPING NAME

DOT
Not applicable.

TDG
Not applicable.

14.3 TRANSPORT HAZARD CLASS (ES)

DOT
Not applicable.

TDG
Not applicable.

**SAFETY DATA SHEET****14.4 PACKING GROUP****DOT**

Not applicable.

TDG

Not applicable.

14.5 ENVIRONMENTAL HAZARDS

Not available.

14.6 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE

Not available.

14.7 SPECIAL PRECAUTIONS FOR USER

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

Section 15: REGULATORY INFORMATION**15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/ LEGISLATIONS SPECIFIC FOR THE CHEMICAL**

Canada: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

US: SDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

SARA Title III				
Ingredient	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313
Lubricating oils, refined used	Not listed.	Not listed.	Not listed.	Not listed.
1-Decene, homopolymer, hydrogenated	Not listed.	Not listed.	Not listed.	Not listed.
Butanedioic acid, [(4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl)thio]-, bis(2-ethylhexyl) ester	Not listed.	Not listed.	Not listed.	Not listed.
Ethylbenzene	Not listed.	Not listed.	1,000	313
Diethanolamine	Not listed.	Not listed.	100	313

State Regulations**California Proposition 65:**

This product contains chemicals known to the State of California to cause cancer.

Global Inventories:

Ingredient	Canada DSL/NDSL	USA TSCA
Lubricating oils, refined used	DSL	Yes.
1-Decene, homopolymer, hydrogenated	DSL	Yes.
Butanedioic acid, [(4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl)thio]-, bis(2-ethylhexyl) ester	NDSL	No.
Ethylbenzene	DSL	Yes.
Diethanolamine	DSL	Yes.



SAFETY DATA SHEET

NFPA National Fire Protection Association:	
Health:	1
Fire:	1
Reactivity:	0
HMIS-Hazardous Materials Identification System	
Health:	1*
Fire:	1
Physical Hazard:	0

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

SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

CP65 California Proposition 65

OSHA (O) Occupational Safety and Health Administration.

ACGIH (G) 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 (I) 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 (N) National Toxicology Program.

- 1 - Known to be carcinogens.
- 2 - Reasonably anticipated to be carcinogens.

Section 16: OTHER INFORMATION

Date of Preparation: March 5, 2015

Expiry Date: March 5, 2018

Version: 1.0

Revision Date: March 5, 2015

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: Nexreg Compliance Inc.
 Phone: (519) 488-5126
www.nexreg.com

Prepared for: International Lubricants, Inc.

End of Safety Data Sheet