



VERSION
PCMOS.001

Liquid Guardian Full Synthetic Motor Oil

SAFETY DATA SHEET

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

SECTION 1: IDENTIFICATION

1.1 PRODUCT IDENTIFIER

Product Form: Mixture

Product Name: Liquid Guardian Full Synthetic LSPI Engine Oil

Product Grades: 0W-20, 0W-30, 5W-20, 5W-30, 10W-30

Product Codes: See section 16

Synonyms: Engine Oil

1.2 INTENDED USE OF THE PRODUCT

Engine Oil

1.3 NAME, ADDRESS, AND TELEPHONE OF THE RESPONSIBLE PARTY

Christensen Inc.

1060 Jadwin Ave. Richland, WA 99352

(509) 882-2115

www.ChristensenUSA.com

1.4 EMERGENCY TELEPHONE NUMBER

Emergency Number: 1-800-424-9300, CHEMTREC

SECTION 2: HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Classification (GHS-US)

This material is not hazardous according to regulatory guidelines (see Section 15).

Full text of H-phrases: (see section 16).

2.2 LABEL ELEMENTS

GHS-US Labeling

Hazard Pictograms (GHS-US): None Required

Signal Word (GHS-US): Not Classified

Hazard Statements (GHS-US): Not expected to be a health hazard when used under normal conditions.

Precautionary Statements (GHS-US):

Prevention

P273: Avoid release into the environment

P301: If swallowed immediately call a POISON CENTER or doctor/physician

P331: Do NOT induce vomiting



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Response**P391:** Collect Spillage**Storage**

None

Disposal**P501** - Dispose of contents/container in accordance with local, regional, national, and international regulations.**2.3 OTHER HAZARDS**

None Noted

2.4 UNKNOWN ACUTE TOXICITY (GHS-US)

None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1 SUBSTANCES**

Not applicable

3.2 MIXTURE

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Heavy paraffinic, Distillates, petroleum, hydrotreated heavy paraffinic	(CAS No) 64742-54-7	45 - 51, 55 - 67	Asp. Tox. 1, H304
Paraffin oils*	(CAS No) 8012-95-1	0 - 0.1, 0.1 - 1, 1 - 5	Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1-Decene, homopolymer, hydrogenated	(CAS No) 68037-01-4	25 - 42, 20 - 30	Asp. Tox. 1, H304
ZINC BIS(O,O-DIISOCTYL) BIS(DITHIOPHOSPHATE)	(CAS No) 28629-66-5	0.1 - < 1%	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 2, H401 Aquatic Chronic 2, H411

* The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200].

* More than one of the ranges of concentration prescribed by Controlled Products Regulations has been used where necessary, due to varying composition.

Full text of H-phrases: (see section 16)

SECTION 4: FIRST AID MEASURES**4.1 DESCRIPTION OF FIRST AID MEASURES**

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

Inhalation: Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory



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protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

Skin Contact: Wash contact areas with soap and water. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Do **NOT** induce vomiting. Rinse mouth. Call a **POISON CENTER** or doctor/physician if you feel unwell.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS BOTH ACUTE AND DELAYED

General: No known significant effects or critical hazards.

Inhalation: Overexposure may be irritating to the respiratory system.

Skin Contact: Repeated or prolonged skin contact may cause irritation.

Eye Contact: Direct contact with the eyes is likely irritating.

Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: No known significant effects or critical hazards.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

Inappropriate Extinguishing Media: Straight streams of water

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Fire Hazard: Not flammable but will support combustion.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3 ADVICE FOR FIREFIGHTERS

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

Fire Fighting Instructions: Evacuate area. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply. Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Hazardous Combustion Products: Aldehydes, Incomplete combustion products, Oxides of carbon, Smoke, Fume, Sulphur oxides.



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FLAMMABILITY PROPERTIES

Flash Point [Method]: >200°C (392°F) [ASTM D-92]

Flammable Limits (Approximate volume % in air): LEL: 0.9 UEL: 7.0

Autoignition Temperature: N/D

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

6.2 PROTECTIVE MEASURES

Avoid contact with spilled material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

6.3 SPILL MANAGEMENT

Land Spill: Stop leak if you can do so without risk. Recover by pumping or with suitable absorbent.

Water Spill: Stop leak if you can do so without risk. Confine the spill immediately with booms. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

6.4 ENVIRONMENTAL PRECAUTIONS

Large Spills: Dyke far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

SECTION 7: HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Additional Hazards When Processed: Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained. Practice good housekeeping – spillage can be slippery on smooth surface either wet or dry.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

7.3 SPECIFIC END USE(S)

Engine Oil



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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

PARAFFIN OILS (8012-95-1)

USA ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³ (excluding metal working fluids, highly & severely refined-inhalable fraction)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen highly and severely refined, Suspected Human Carcinogen highly and severely refined
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	5 mg/m ³
USA NIOSH	NIOSH REL (STEL) (mg/m ³)	10 mg/m ³
USA IDLH	US IDLH (mg/m ³)	2500 mg/m ³
Alberta	OEL STEL (mg/m ³)	10 mg/m ³
Alberta	OEL TWA (mg/m ³)	5 mg/m ³
British Columbia	OEL TWA (mg/m ³)	0.2 mg/m ³ (mildly refined) 1 mg/m ³ (severely refined)
Manitoba	OEL TWA (mg/m ³)	5 mg/m ³ (excluding metal working fluids, highly & severely refined-inhalable fraction)
New Brunswick	OEL STEL (mg/m ³)	10 mg/m ³
New Brunswick	OEL TWA (mg/m ³)	5 mg/m ³ (as sampled by a method that does not collect vapor)
Newfoundland & Labrador	OEL TWA (mg/m ³)	5 mg/m ³ (excluding metal working fluids, highly & severely refined-inhalable fraction)
Nova Scotia	OEL TWA (mg/m ³)	5 mg/m ³ (excluding metal working fluids, highly & severely refined-inhalable fraction)
Nunavut	OEL STEL (mg/m ³)	10 mg/m ³
Nunavut	OEL TWA (mg/m ³)	5 mg/m ³
Northwest Territories	OEL STEL (mg/m ³)	10 mg/m ³
Northwest Territories	OEL TWA (mg/m ³)	5 mg/m ³
Ontario	OEL TWA (mg/m ³)	5 mg/m ³ (pure, highly and severely refined, excluding metal working fluids-inhalable)
Prince Edward Island	OEL TWA (mg/m ³)	5 mg/m ³ (excluding metal working fluids, highly & severely refined-inhalable fraction)
Québec	VECD (mg/m ³)	10 mg/m ³ (mist)
Québec	VEMP (mg/m ³)	5 mg/m ³ (mist)
Saskatchewan	OEL STEL (mg/m ³)	10 mg/m ³
Saskatchewan	OEL TWA (mg/m ³)	5 mg/m ³
Yukon	OEL STEL (mg/m ³)	10 mg/m ³
Yukon	OEL TWA (mg/m ³)	5 mg/m ³



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8.2 EXPOSURE CONTROLS

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment: Protective goggles. Gloves.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

- Nitrile, Viton
- No protection is ordinarily required under normal conditions of use

Eye Protection: If contact is likely, safety glasses with side shields are recommended.

Skin and Body Protection: Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

- No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.

Respiratory Protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Environmental Exposure Controls: Do not allow the product to be released into the environment.

Consumer Exposure Controls: Do not eat, drink or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Amber
Odor	Slight Hydrocarbon
Odor Threshold	Not available
pH	Not available
Evaporation Rate	Not available

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9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES (CONT'D)

Melting Point	Not available
Boiling Point	>316°C (600°F)
Flash Point	>200°C (392°F)
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Flammability (solid, gas)	Not available
Lower Flammable Limit	Not available
Upper Flammable Limit	Not available
Vapor Pressure	< 0.013 kPa (0.1 mm Hg) at 20 °C
Relative Vapor Density at 20 °C	> 2 at 101 kPa
Relative Density	Not available
Specific Gravity	0.855
Solubility	Negligible
Partition Coefficient: N-Octanol/Water	>3.5
Viscosity	Not available
Viscosity, Kinematic	7-15 cSt @ 100 °C
Explosive Properties	Product is not explosive
Explosion Data – Sensitivity to Mechanical Impact	Not expected to present an explosion hazard due to mechanical impact
Explosion Data – Sensitivity to Static Discharge	Not expected to present an explosion hazard due to static discharge

SECTION 10: STABILITY AND REACTIVITY**10.1 REACTIVITY**

Hazardous reactions will not occur under normal conditions.

10.2 CHEMICAL STABILITY

Stable under recommended handling and storage conditions (see section 7).

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

Hazardous polymerization will not occur.

10.4 CONDITIONS TO AVOID

Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.

10.5 INCOMPATIBLE MATERIALS

Strong oxidizers.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

Material does not decompose at ambient temperatures.



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SECTION 11: TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS - PRODUCT

Acute Toxicity: Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Minimally Toxic

Eye Damage/Irritation: May cause mild, short-lasting discomfort to eyes. Based on assessment of the components.

Respiratory or Skin Sensitization: Minimally Toxic

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Overexposure may be irritating to the respiratory system.

Symptoms/Injuries After Skin Contact: Repeated or prolonged skin contact may cause irritation.

Symptoms/Injuries After Eye Contact: Direct contact with the eyes is likely irritating.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: Not Classified

11.2 INFORMATION ON TOXICOLOGICAL EFFECTS - INGREDIENT(S)

LD50 and LC50 Data

PARAFFIN OILS (8012-95-1)

LC50 Inhalation Rat	2062 ppm/4h
ATE US (gases)	2,062.00 ppmV/4h

HEAVY PARAFFINIC, DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC (64742-54-7)

LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rabbit	> 2 g/kg

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SECTION 12: ECOLOGICAL INFORMATION**12.1 TOXICITY****Ecology - General:** Toxic to aquatic life.**DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC (64742-54-7)**

LC50 Fish 1	> 5000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	> 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)

12.2 PERSISTENCE AND DEGRADABILITY

Not available

12.3 BIOACCUMULATIVE POTENTIAL

Not available

12.4 MOBILITY IN SOIL

Not available

12.5 OTHER ADVERSE EFFECTS**Other Information:** Avoid release to the environment.**SECTION 13: DISPOSAL CONSIDERATIONS****13.1 DISPOSAL RECOMMENDATIONS BASED ON MATERIAL AS SUPPLIED**

Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

DISPOSAL RECOMMENDATIONS

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products. Protect the environment. Dispose of used oil at designated sites. Minimize skin contact. Do not mix used oils with solvents, brake fluids or coolants.

EMPTY CONTAINER WARNING (WHERE APPLICABLE)

Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations.

DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

SECTION 14: TRANSPORT INFORMATION**14.1 IN ACCORDANCE WITH DOT** Not regulated for transport**14.2 IN ACCORDANCE WITH IMDG** Not regulated for transport**14.3 IN ACCORDANCE WITH IATA** Not regulated for transport**14.4 IN ACCORDANCE WITH TDG** Not regulated for transport



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SECTION 15: REGULATORY INFORMATION

15.1 US FEDERAL REGULATIONS

SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
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15.2 US STATE REGULATIONS

Paraffin oils (8012-95-1)

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

15.3 CANADIAN REGULATIONS

WHMIS Classification: Not Classified

PARAFFIN OILS (8012-95-1)

Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC (64742-54-7)

Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

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

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date: 05/1/2018

Other Information: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

GHS FULL TEXT PHRASES

Asp. Tox. 1	Aspiration hazard Category 1
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H318	Causes serious eye damage



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GHS FULL TEXT PHRASES (CONT'D)

H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects
H413	May cause long lasting harmful effects to aquatic life

PARTY RESPONSIBLE FOR THE PREPARATION OF THIS DOCUMENT

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS US 2012 & WHMIS 2