



# Material Safety Data Sheet

**Material Name: ProGuard Heavy Duty Engine Oils 10, 20, 30, 40 & 50 wt.**

## Section 1: Chemical Product And Company Identification

**Part Number:** NA

**Chemical Name:** Diesel Engine Oil

**Product Use:** For lubricating diesel engines.

**Manufacturer Information:** Lyden Oil Company  
3711 LeHarps Road  
Youngstown, Ohio 44515

### EMERGENCY TELEPHONE NUMBERS:

Lyden Oil Company 330-792-1100 Normal Business Hours  
(800) 362-9410 After Business Hours

## Section 2: Composition / Information on Ingredients

WT%	NAME	SYNONYM	CAS NO.	OSHA PEL		ACGIH TLV		LD <sup>a</sup>	LC <sup>b</sup>
				TWA	STEL	TWA	STEL		
30 to 95	Lubricating oils, petroleum, Hydrotreated spent	Hydrotreated paraffinic base oil	64742-58-1	5 <sup>c</sup> mg/m3	N/A	5 <sup>c</sup> mg/m3	10 <sup>c,d</sup> mg/m3	>15000 <sup>e,f</sup>	N/A
0 to 50	Residual Oils (petroleum) solvent-dewaxed	Bright stock	64742-62-7	5 <sup>c</sup> mg/m3	N/A	5 <sup>c</sup> mg/m3	10 <sup>c,d</sup> mg/m3	>10000 <sup>f</sup>	N/A
0 to 50	Residual Oils (petroleum) hydrotreated	Bright stock	64742-57-0	5 <sup>c</sup> mg/m3	N/A	5 <sup>c</sup> mg/m3	10 <sup>c,d</sup> mg/m3	N/A	N/A
0 to 50	Lubricating oils (petroleum) hydrotreated	Bright stock	72623-83-7	5 <sup>c</sup> mg/m3	N/A	5 <sup>c</sup> mg/m3	10 <sup>c,d</sup> mg/m3	>5000 <sup>g</sup>	N/A
0 to 50 <sup>h</sup>	Mineral Oil	***	***	5 <sup>c</sup> mg/m3	N/A	5 <sup>c</sup> mg/m3	10 <sup>c,d</sup> mg/m3	N/A	N/A
0 to 9	Additives	***	***	N/A <sup>i</sup>	N/A	N/A	N/A	N/A	N/A
30 to 6.0	Distillates (petroleum) hydrotreated heavy paraffinic	N/A	64742-54-7	5 <sup>c</sup> mg/m3	N/A	5 <sup>c</sup> mg/m3	10 <sup>c,d</sup> mg/m3	>15000 <sup>g</sup>	N/A
30 to 6.0	Distillates (petroleum) solvent-dewaxed heavy paraffinic	N/A	64742-54-7	5 <sup>c</sup> mg/m3	N/A	5 <sup>c</sup> mg/m3	10 <sup>c,d</sup> mg/m3	N/A	N/A
0 to 2 <sup>h</sup>	Alkaryl amine	***	***	N/A	N/A	N/A	N/A	N/A	N/A
0 to 1.5	Benzenamine, N-phenyl- reaction products with 2,4,4,-trimethylpentene	Diphenylamine, diisobutylene reaction product	68411-46-1	N/A	N/A	N/A	N/A	7580	N/A
0 to 1.5	Phosphorodithioic acid, O,O-di-C1-14-alkyl Esters, zinc salts**	Dialkyl (C1-C14) dithiophosphoric acid, zinc salt	68649-42-3	N/A	N/A	N/A	N/A	N/A	N/A

Even though the concentration range does not fall under the ranges prescribed by WHMIS, This is the actual range which varies with each Batch of the product.

\*\* See SECTION 15: SARA TITLE III

\*\*\*supplier advises that this is a trade secret

<sup>a</sup>Oral – Rat LD50 (mg/kg)

<sup>b</sup>Inhalation – Rat LC50

<sup>c</sup>Based on Oil mist, mineral.

<sup>d</sup>Notice of Intended Changes: N/A

<sup>e</sup>Based on similar materials.

<sup>f</sup>Skin – Rabbit LD50 is greater than 2000 mg/kg

<sup>g</sup>Skin - Rabbit LD50 is greater than 30

<sup>h</sup>Supplier advises that the concentration is a trade secret; however it will fall within this range.

<sup>i</sup>Manufacturer recommended TWA = 5 mg/m<sup>3</sup>

N/A = Not Available

See 29 CFR 1910.1000 (d) (2) and Threshold Limit Values for Chemical Substances and Physical Agents booklet (Appendix C) for the Determination of exposure limits for mixtures. Consult an industrial hygienist or similar professional to confirm that the calculated exposure Limits are appropriate.

## SECTION 3 : HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

#### CAUTION!

#### APPEARANCE

Liquid, amber, petroleum odor.

#### IMMEDIATE HAZARDS

May cause respiratory tract ( nose, throat, and lungs) , eye, and skin irritation.

#### POTENTIAL HEALTH EFFECTS

**INHALATION (BREATHING)** High concentrations of vapor or mist may irritate the respiratory tract (nose, throat, and lungs).

**EYES:** Brief, direct contact with product may cause irritation.

**SKIN:** Brief, direct contact with product may cause irritation. A single, prolonged Exposure is not likely to cause the product to be absorbed through the skin in harmful amounts.

**INGESTION: (SWALLOWING):** May cause throat irritation, nausea, vomiting, and diarrhea. Breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Individuals with pre-existing, respiratory tract (nose, throat, And lungs), eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

**CHRONIC:** Prolonged or repeated inhalation of oil mist may cause oil pneumonia, lung Tissue inflammation and/or fibrous tissue formation. Prolonged or repeated Eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact Cause drying, crackin, redness, itching, and/or swelling (dermatitis).

**CANCER INFORMATION:** No known carcinogenicity. For more information, see **SECTION 11; CARCINOGENICITY.**

Also see **SECTION 15: CALIFORNIA**

## **SECTION 4: FIRST AID MEASURES**

**INHALATION:  
(BREATHING)** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Someone should stay with victim. Get medical attention if breathing difficulty persists.

**EYES:** For direct contact, immediately flush eyes with plenty of water, holding Eyelids apart, for 15 minutes. If irritation or redness from exposure to Vapor develops, move away from exposure into fresh air. Get medical Attention if irritation or pain persists.

**SKIN:** Remove contaminated clothing and shoes. Wash skin thoroughly with Soap and water. Get medical attention if irritation or pain persists. If Product is injected under pressure into or under the skin; or into any part Of the body; regardless of the appearance of the wound or its size, a Physician should immediately evaluate the individual as a medical Emergency.

**INGESTION:  
(SWALLOWING)** Immediately get medical attention. Call medical emergency telephone number (see **SECTION 1**) for additional information. DO NOT induce vomiting. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs.

**NOTE TO PHYSICIANS:** No specific antidote available. Treat symptomatically and supportively. Call medical emergency telephone number (see **SECTION 1**) for Additional information.

## **SECTION 5: FIRE FIGHTING MEASURES**

**FLASH POINT:** 392° ( 200°C) (minimum) Cleveland Open Cup

**FLAMMABLE LIMITS IN AIR:** **LOWER:** 1 VOL% (based on similar materials)  
**UPPER:** 10 VOL% (based on similar materials)

**AUTOIGNITION TEMPERATURE:** 750° F (399°C) (approximately) (based on similar Materials)

**HAZARDOUS COMBUSTION PRODUCTS:** Decomposition and combustion materials may be toxic. Burning may produce hydrogen sulfide, alkyl mercaptans, Sulfides, aldehydes, calcium oxides, sulfur oxides, nitrogen

Oxides, carbon monoxide, and unidentified organic Compounds.

**CONDITIONS OF  
FLAMMABILITY:**

Heat, sparks, or flame. Product may burn, but does not ignite readily.

**EXTINGUISHING MEDIA:**

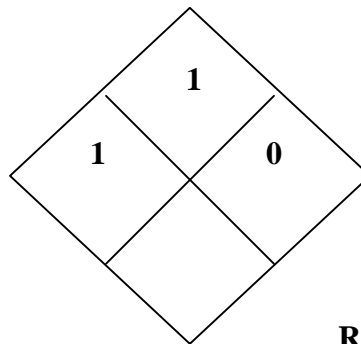
Carbon dioxide, regular foam, dry chemical, water spray, or Water fog.

**NFPA 704  
HAZARD  
IDENTIFICATION:**

This information is intended solely for the use of individuals trained in this system.

**HEALTH HAZARD  
(BLUE)**

**FIRE HAZARD  
(RED)**



**SPECIFIC  
HAZARD  
(WHITE)**

**REACTIVITY  
(YELLOW)**

**FIRE FIGHTING  
INSTRUCTIONS:**

Keep storage containers cool with water spray. Positive-pressure, self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing may provide limited protection.

**FIRE AND  
EXPLOSION HAZARDS:**

Heated containers may rupture. "Empty" containers may retain residue and can be dangerous. Not sensitive to Mechanical impact or static discharge.

**EMERGENCY RESPONSE  
GUIDE NUMBER:**

Not applicable  
Reference *North American Emergency Response Guidebook*

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can Do it without risk. Wear protective equipment specified in **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**. Isolate hazard area. Keep unnecessary and Unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. Contain away from surface waters and sewers. Contain as a liquid for possible recovery or Sorb with compatible sorbent material and shovel with a clean tool into a sealable container for Disposal.

Additionally, for large spills dike far ahead of liquid spill for collection and later disposal.

## **SECTION 7: HANDLING AND STORAGE**

- HANDLING:** Keep away from heat, sparks, or flame. Use clean tools. This product has a Low vapor pressure and is not expected to present an inhalation under Normal temperatures and pressures. However, when aerololing or misting This product, do not breathe vspor or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, and shoes.
- SHIPPING AND STORING:** Keep container tightly closed when not in use and during transport Store container in a cool, dry place. Do not pressurize, cut, weld, Braze, solder, drill, or grind. Keep containers away from heat, flame, Sparks, or other sources of ignition. Empty product containers may Retain product residue and can be dangerous.
- PERSONAL HYGIENE:** Use good personal hygiene. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco products. Clean contaminated clothing, shoes, and protective equipment before reuse. Discard leather articles, such as shoes, saturated with the product.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

- ENGINEERING CONTROLS:** Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate General ventilation is unavailable, use process enclosures, Local exhaust ventilation, or other engineering control Airborne levels below recommended exposure limits.

## PERSONAL PROTECTIVE EQUIPMENT

<b>RESPIRATORY PROTECTION:</b>	Use NIOSH- approved respiratory protective equipment when concentration of vapor or mist exceeds applicable Exposure limits. Do not use N-rated respirators. A Self-contained breathing apparatus (SCBA) and full Protective equipment are required for fire emergencies. Selection and use of respiratory protective equipment Should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4-M1982.
<b>EYE PROTECTION:</b>	Where eye contact is likely, wear safety glasses; contact lens use is not recommended.
<b>SKIN PROTECTION:</b>	Where skin contact is likely, wear chemical-resistant gloves. Where spills and splashes are likely, wear chemical resistant apron boots, or other protective clothing to avoid prolonged or repeated contact.
<b>OTHER PROTECTIVE EQUIPMENT:</b>	Facilities storing or using this product should be equipped with an emergency eyewash in the immediate work area. Clean water should be available in work areas for flushing the eyes and skin.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>PHYSICAL STATE, APPEARANCE, AND ODOR:</b>	Liquid, amber, petroleum odor.
<b>ODOR THRESHOLD:</b>	Not available.
<b>SPECIFIC GRAVITY:</b>	0.88 (water = 1) (approximately)
<b>DENSITY:</b>	7.3 LB/US gal (880 g/l) (approximately)
<b>VAPOR DENSITY:</b>	greater than 10 (air = 1) (based on similar materials)
<b>VAPOR PRESSURE:</b>	less than 0.1 mm Hg at 68°F (20°C) (Based on similar materials)
<b>BOILING POINT:</b>	420° F (220°C) (minimum)
<b>FREEZING/MELTING POINT:</b>	Not available [pour point 16°F (-9°C) (maximum)].
<b>Ph:</b>	Not applicable.

<b>EVAPORATION RATE:</b>	0.001 (ethyl ether = 1) (based on similar materials)
<b>SOLUBILITY IN WATER:</b>	Insoluble.
<b>MOLECULAR WEIGHT:</b>	Not applicable

## SECTION 10: STABILITY AND REACTIVITY

<b>STABILITY:</b>	Stable under normal temperatures and pressures. Avoid heat, sparks, or flame.
<b>INCOMPATIBILITY:</b>	Avoid oxidizing agents.
<b>REACTIVITY:</b>	Polymerization is not known to occur under normal Temperatures and pressures. Not reactive with Water.

## SECTION 11: TOXICOLOGICAL INFORMATION

<b>SENSITIZATION:</b>	Based on best current information, there is no Known human sensitization associated with this Product.
<b>CARCINOGENICITY:</b>	IARC classifies chemicals by their hazard, include including agents that are carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B). NTP classifies chemicals as either known carcinogens, or for which there is limited evidence of carcinogenicity in humans or sufficient evidence of carcinogenicity in experimental animals ACGIH recognizes several categories of carcinogens, including confirmed human carcinogens (A2).

No animal skin carcinogenicity tests of these materials have been conducted. Neither IARC, NTP, ACGIH, nor OSHA have classified these materials as to their carcinogenic risk.

Also see **SECTION 15: CALIFORNIA.**

<b>REPRODUCTIVE TOXICITY:</b>	Based on best current information, there is no known reproductive toxicity associated with this product.
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Also see **SECTION 15: CALIFORNIA.**

<b>TERATOGENICITY:</b>	Based on best information, there is no known Teratogenicity associated with this product.
<b>MUTAGENICITY:</b>	Experimental evidence suggests that this product Does not cause mutagenesis.
<b>TOXICOLOGICALLY SYNERGISTIC PRODUCT(S):</b>	Bases on best current information, there are no known toxicologically synergistic products associated with this product.

#### **SECTION 12; ECOLOGICAL INFORMATION**

**ECOTOXICITY:** Not available.

**OCTANOL/WATER PARTITION COEFFICIENT:** Not Available

**VOLATILE ORGANIC COMPOUNDS:** 100 WT % ; 7.3 LB/US gal; 880 g/l (approximately)  
Photochemically reactive as per 40 CFR Part 51.100(s).

#### **SECTION 13: DISPOSAL CONSIDERATIONS**

**DISPOSAL:** Dispose in accordance with federal, state, provincial and Local regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the Owner of the waste. Contact Safety-Kleen regarding Recycling or proper disposal.

**USEPA WASTE CODE(S):** Not regulated.  
This product, if discarded, is expected to be a characteristic Waste. If recycled in the USA, it must be managed in Accordance with 40 CFR part 279. Processing, use, or Contamination may make this information inappropriate, Inaccurate, or incomplete.

#### **SECTION 14: TRANSPORT INFORMATION**

**DOT:** Not regulated.

**TDG:** This product is not for sale in Canada.



<b>SECTION 15 REGULATORY INFORMATION</b>
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**USA REGULATIONS****SARA SECTIONS**

**311 AND 312:** Not available.

**SARA SECTION 313:** Double asterisk component in **SECTION 2** is subject to the Requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372, under the Zinc compounds category. Additional Information is not available.

**TSCA:** All the components of this product are listed on, or are exempted From the requirements to be listed on, the TSCA inventory.

**CALIFORNIA:** This product contains acetaldehyde, CAS 75-07-0; arsenic, CAS 7440-38-2; benzene, CAS 71-43-2; 1,3-butadiene, CAS 106-99-0; cadmium, CAS 7440-43-9; and lead, CAS 7439-92-1; from additives. This product may contain detectable amounts of benzo (a) anthracene, CAS 56-55-3; benzo (k) fluoranthene, CAS 207-08-9; benzo(a)pyrene, CAS 50-32-8; benzo(b) fluoranthene, CAS 205-99-2; chrysene, CAS 218-01-9; dibenz(a,h) anthracene, CAS 53-70-3; and indeno (1'2'3-cd) pyrene, CAS 193-39-5. These materials are listed by the State of California as known carcinogens. Our testing of this product indicates that these materials are not always detectable. This product contains a detectable amounts of lead. CAS 7439-92-1 from additives. This material is listed by the State of California as known to cause reproductive toxicity.

**CANADIAN REGULATIONS**

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.

**WHMIS:** This product is not for sale or use in Canada.

**CANADIAN  
ENVIRONMENTAL  
PROTECTION ACT  
(CEPA):**

This product is not for sale or use in Canada.

<b>SECTION 16. OTHER INFORMATION</b>
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**REVISION INFORMATION:**

**SECTION 1; PRODUCT NAME;** Version identifiers.

**LABEL/OTHER INFORMATION:** .Not available

User assumes all risks incident to the use of this product.

Updated: March 01, 2010

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Disclaimer: Lyden Oil Company, Inc. believes this information is accurate but not all-inclusive in all circumstances. It is the responsibility of the user to determine suitability of the material for their purposes. No warranty, expressed or implied, is given.