



PROGUARD RAILROAD DIESEL ENGINE OILS MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: PROGUARD RAILROAD DIESEL ENGINE OIL 20W40 13TBN
PROGUARD RAILROAD DIESEL ENGINE OIL 20W40 17TBN
PROGUARD RAILROAD DIESEL ENGINE OIL 40 13TBN
PROGUARD RAILROAD DIESEL ENGINE OIL 40 17TBN

SYNONYMS: Petroleum oil; Lube oil; Petroleum hydrocarbon; Lubricant.

PRODUCT CODE: Prefix 22

PRODUCT USE: For lubricating medium speed diesel engines used in railroad, marine and stationary applications.00-USE-00 1

SUPPLIER: Lyden Oil Company
3711 LeHarps Road
Youngstown, Ohio 44515
USA
1-800-362-9410
www.lydenoil.com

24-HOUR EMERGENCY PHONE NUMBERS MEDICAL AND TRANSPORTATION (SPILL):

Off Hours 1-800-362-9410

Business Hours 1-330-792-1100

MSDS FORM NUMBER: 82654

ISSUE: February 7, 2008

ORIGINAL ISSUE: February 7, 2008

SUPERSEDES:

PREPARED BY: Product MSDS Coordinator

PROGUARD RAILROAD DIESEL ENGINE OILS

MATERIAL SAFETY DATA SHEET

SECTION 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

APPEARANCE

Amber liquid, petroleum odor.

CAUTION!

HEALTH HAZARDS May be harmful if swallowed. May irritate eyes and skin.

POTENTIAL HEALTH EFFECTS

INHALATION (BREATHING): These products are not likely to present an inhalation hazard at normal temperatures and pressures. However, when aerosolizing, misting, or heating these products, high concentrations of generated vapor or mist may irritate the respiratory tract (nose, throat, and lungs).

EYES: May cause irritation.

SKIN: May cause irritation. Not likely to be absorbed through the skin in harmful amounts.

INGESTION (SWALLOWING): May be harmful if swallowed. 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 may cause drying, cracking, redness, itching, and/or swelling (dermatitis).

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

Also see **SECTION 15: CALIFORNIA**.

POTENTIAL ENVIRONMENTAL EFFECTS

Not available. Also see **SECTION 12: ECOLOGICAL INFORMATION**.

PROGUARD RAILROAD DIESEL ENGINE OILS

MATERIAL SAFETY DATA SHEET

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Component	Synonyms	Percent
64742-58-1	Lubricating oils, petroleum, hydrotreated spent	Hydrotreated paraffinic base oil	45-65
64742-52-5	Petroleum distillates, hydrotreated heavy naphthenic	Not Available	7-10; 10-30
72623-83-7**	Lubricating oils (petroleum), C>25, hydrotreated bright stock	Bright Stock	16
64742-62-7**	Residual oils (petroleum), solvent dewaxed	Bright Stock	16
64742-01-4**	Residual oils (petroleum), solvent refined	Bright Stock	16
64741-88-4	Petroleum distillates, solvent-refined heavy paraffinic	Not Available	0.1-1; 1-5; 5-7
64742-54-7	Petroleum distillates, hydrotreated heavy paraffinic	Not Available	0.1-1; 1-5; 5-7
*	Not Available*	Additive	0.1-1; 1-5; 5-6

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Oil mist, mineral (8012-95-1).

*Supplier and/or Lyden Oil advises that this is a trade secret.

**Only one of the above listed Bright Stocks will be present in the product at anytime at the indicated WT%.

SECTION 4: FIRST AID MEASURES

INHALATION (BREATHING):	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Someone should stay with victim. Get medical attention if breathing difficulty persists.
EYES:	If irritation or redness from exposure to vapor develops, move away from exposure into fresh air. Upon contact, immediately flush eyes with plenty of lukewarm water, holding eyelids apart, for 15 minutes. Get medical attention.
SKIN:	Remove affected clothing and shoes. Wash skin thoroughly with soap and water. Get medical attention if irritation or pain develops or 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.

PROGUARD RAILROAD DIESEL ENGINE OILS

MATERIAL SAFETY DATA SHEET

INGESTION (SWALLOWING): Do NOT induce vomiting. Immediately get medical attention. Call 1-800-468-1760 for additional information. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs. Never give anything by mouth to an unconscious person.

NOTE TO PHYSICIANS: Treat symptomatically and supportively. Treatment may vary with condition of victim and specifics of incident. Call 1-800-468-1760 for additional information.

SECTION 5: FIRE FIGHTING MEASURES

HAZARDOUS COMBUSTION PRODUCTS: Decomposition and combustion materials may be toxic. Burning may produce aldehydes, ketones, carbon monoxide, and unidentified organic compounds.

CONDITIONS OF FLAMMABILITY: Sparks or flame. Product may burn, but does not ignite readily.

PROTECTIVE EQUIPMENT FOR FIREFIGHTERS: A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

EXTINGUISHING MEDIA: Carbon dioxide, regular foam, dry chemical, water spray, or water fog. Water or foam may cause frothing.

NFPA 704 HAZARD IDENTIFICATION: This information is intended solely for the use by individuals

**HEALTH HAZARD
(BLUE)**

**FIRE HAZARD
(RED)**

1 1
1 0

**SPECIFIC
HAZARD
(WHITE)**

**REACTIVITY
(YELLOW)**

FIRE FIGHTING INSTRUCTIONS:

trained in this system.

Keep storage containers cool with water spray.

FIRE AND EXPLOSION HAZARDS:

Heated containers may rupture. "Empty" containers may retain residue and can be dangerous. Products are not sensitive to mechanical impact or static discharge.

PROGUARD RAILROAD DIESEL ENGINE OILS

MATERIAL SAFETY DATA SHEET

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 and provide engineering controls as 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 spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and shovel with a clean, sparkproof 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 sparks or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean tools and explosion-proof equipment. When transferring large volumes of product, metal containers, including trucks and tank cars, should be grounded and bonded. These products have a low vapor pressure and are not expected to present an inhalation hazard under normal temperatures and pressures. However, when aerosolizing, misting, or heating these products, do not breathe vapor 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 containers in a cool, dry place. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from flame, sparks, static electricity, or other sources of ignition. Empty product containers may retain product residue and can be dangerous.

PROGUARD RAILROAD DIESEL ENGINE OILS

MATERIAL SAFETY DATA SHEET

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES:

Component Exposure Limits

Lubricating oils, petroleum, hydrotreated spent (64742-58-1)

ACGIH: 5 mg/m3 TWA (sampled by method that does not collect vapor) (related to Oil mist, mineral)
10 mg/m3 STEL (related to Oil mist, mineral)
OSHA: 5 mg/m3 TWA (related to Oil mist, mineral)
NIOSH: 5 mg/m3 TWA (related to Oil mist (mineral))
10 mg/m3 STEL (related to Oil mist (mineral))

Residual oils (petroleum), solvent dewaxed (64742-62-7)

ACGIH: 5 mg/m3 TWA (sampled by method that does not collect vapor) (related to Oil mist, mineral)
10 mg/m3 STEL (related to Oil mist, mineral)
OSHA: 5 mg/m3 TWA (related to Oil mist, mineral)
NIOSH: 5 mg/m3 TWA (related to Oil mist (mineral))
10 mg/m3 STEL (related to Oil mist (mineral))

Lubricating oils (petroleum), C>25, hydrotreated bright stock (72623-83-7)

ACGIH: 5 mg/m3 TWA (sampled by method that does not collect vapor) (related to Oil mist, mineral)
10 mg/m3 STEL (related to Oil mist, mineral)
OSHA: 5 mg/m3 TWA (related to Oil mist, mineral)
NIOSH: 5 mg/m3 TWA (related to Oil mist (mineral))
10 mg/m3 STEL (related to Oil mist (mineral))

Petroleum distillates, hydrotreated heavy paraffinic (64742-54-7)

ACGIH: 5 mg/m3 TWA (sampled by method that does not collect vapor) (related to Oil mist, mineral)
10 mg/m3 STEL (related to Oil mist, mineral)
OSHA: 5 mg/m3 TWA (related to Oil mist, mineral)
NIOSH: 5 mg/m3 TWA (related to Oil mist (mineral))
10 mg/m3 STEL (related to Oil mist (mineral))

Petroleum distillates, solvent-refined heavy paraffinic (64741-88-4)

ACGIH: 5 mg/m3 TWA (sampled by method that does not collect vapor) (related to Oil mist, mineral)
10 mg/m3 STEL (related to Oil mist, mineral)
OSHA: 5 mg/m3 TWA (related to Oil mist, mineral)
NIOSH: 5 mg/m3 TWA (related to Oil mist (mineral))
10 mg/m3 STEL (related to Oil mist (mineral))

PROGUARD RAILROAD DIESEL ENGINE OILS

MATERIAL SAFETY DATA SHEET

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 controls to control airborne levels below applicable exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION: Use NIOSH-certified P- or R- series particulate filter and organic vapor cartridges when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air purifying respirators is limited. Do not use N-rated respirators. 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.

EYE PROTECTION: Where eye contact is likely, wear safety glasses; contact lens use is not recommended.

SKIN PROTECTION: Where skin contact is likely, wear chemical impervious protective gloves; use of natural rubber or equivalent gloves is not recommended.

When products are heated and skin contact is likely, wear heat-resistant gloves, boots, and other protective clothing.

To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, coveralls, long sleeve shirts, or other protective clothing.

PERSONAL HYGIENE: Use good personal hygiene. Wash thoroughly with soap and water after handling product and before eating, drinking, or using tobacco products. Clean affected clothing, shoes, and protective equipment before reuse. Discard leather articles, such as shoes, saturated with these products.

OTHER PROTECTIVE EQUIPMENT: Where spills and splashes are likely, facilities storing or using these products should be equipped with an emergency eyewash and shower, both equipped with clean water, in the immediate work area.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
--

PHYSICAL STATE, APPEARANCE, AND ODOR: Amber liquid, petroleum odor.

ODOR THRESHOLD: Not available

MOLECULAR WEIGHT: Not applicable

PROGUARD RAILROAD DIESEL ENGINE OILS

MATERIAL SAFETY DATA SHEET

SPECIFIC GRAVITY:	0.89 (water = 1) (approximately)
DENSITY:	7.4 LB/US gal (890 g/l) (approximately)
VAPOR DENSITY:	Not available
VAPOR PRESSURE:	Less than 0.1 mm Hg at 68°F (20°C)
BOILING POINT:	475°F (246°C) (minimum)
FREEZING/MELTING POINT:	Not available [pour point 5°F (-15°C) (maximum)].
pH:	Not applicable
EVAPORATION RATE:	Not available
SOLUBILITY IN WATER:	Insoluble
FLASH POINT:	450°F (232°C) (minimum) Cleveland Open Cup
FLAMMABLE LIMITS IN AIR:	LOWER: Not available UPPER: Not available
AUTOIGNITION TEMPERATURE:	Not available

SECTION 10: STABILITY AND REACTIVITY

STABILITY:	Stable under normal temperatures and pressures.
CONDITIONS TO AVOID:	Avoid sparks or flame.
INCOMPATIBILITY:	Avoid acids and oxidizing agents.
REACTIVITY:	Polymerization is not known to occur under normal temperature and pressures. Not reactive with water.
HAZARDOUS DECOMPOSITION PRODUCTS:	None under normal temperatures and pressures. See also SECTION 5: HAZARDOUS COMBUSTION PRODUCTS.

PROGUARD RAILROAD DIESEL ENGINE OILS

MATERIAL SAFETY DATA SHEET

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICITY DATA:

Component Analysis - LD50/LC50

Lubricating oils, petroleum, hydrotreated spent (64742-58-1)

Oral LD50 Rat: >2000 mg/kg

Dermal LD50 Rat: >2000 mg/kg

Dermal LD50 Rabbit: >4480 mg/kg

Petroleum distillates, hydrotreated heavy naphthenic (64742-52-5)

Inhalation LC50 Rat: 2.18 mg/L/4H

Oral LD50 Rat: >5000 mg/kg

Dermal LD50 Rabbit: >2000 mg/kg

Residual oils (petroleum), solvent refined (64742-01-4)

Inhalation LC50 Rat: 2.18 mg/L/4H

Oral LD50 Rat: >5000 mg/kg

Dermal LD50 Rabbit: >2000 mg/kg

Residual oils (petroleum), solvent dewaxed (64742-62-7)

Inhalation LC50 Rat: 2.18 mg/L/4H

Oral LD50 Rat: >5000 mg/kg

Dermal LD50 Rabbit: >2000 mg/kg

Lubricating oils (petroleum), C>25, hydrotreated bright stock (72623-83-7)

Oral LD50 Rat: >5000 mg/kg

Petroleum distillates, hydrotreated heavy paraffinic (64742-54-7)

Inhalation LC50 Rat: >2.18 mg/L/4H

Oral LD50 Rat: >2000 mg/kg

Dermal LD50 Rabbit: >2000 mg/kg

Petroleum distillates, solvent-refined heavy paraffinic (64741-88-4)

Inhalation LC50 Rat: 2.18 mg/L/4H

Oral LD50 Rat: >5000 mg/kg

Dermal LD50 Rabbit: >2000 mg/kg

ACUTE EFFECTS:

May irritate the respiratory tract (nose, throat, and lungs), eyes, and skin. May be harmful if swallowed. May cause nausea, vomiting, and diarrhea. Aspiration Hazard: Breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death.

PROGUARD RAILROAD DIESEL ENGINE OILS

MATERIAL SAFETY DATA SHEET

REPEATED DOSE EFFECTS:

Based on best current information, there is no known human sensitization associated with this product.

Experimental evidence suggests that this product does not cause mutagenesis.

Based on best current information, there is no known reproductive toxicity associated with this product.

Based on best current information, there is no known teratogenicity associated with this product.

CARCINOGENICITY:

Based on best current information, there is no known carcinogenicity as categorized by ACGIH A1 or A2 substances; as categorized by IARC Group 1, Group 2A, or Group 2B agents; or as listed by NTP as either known carcinogens or substances for which there is limited evidence of carcinogenicity in humans or sufficient evidence of carcinogenicity in experimental animals.

Also see **SECTION 15: CALIFORNIA.**

TARGET ORGAN EFFECTS:

Prolonged or repeated inhalation of oil mist may cause oil pneumonia, lung tissue inflammation, and/or fibrous tissue formation.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY:

Component Analysis - Ecotoxicity - Aquatic Toxicity

Lubricating oils, petroleum, hydrotreated spent (64742-58-1)

Test & Species	Concentration	Conditions
96 Hr LC50 Brachydanio rerio	79.6 mg/L	semi-static
96 Hr LC50 Pimephales promelas	3.2 mg/L	semi-static

Petroleum distillates, hydrotreated heavy naphthenic (64742-52-5)

Test & Species	Concentration	Conditions
96 Hr LC50 Pimephales promelas	>5000 mg/L	

Residual oils (petroleum), solvent refined (64742-01-4)

Test & Species	Concentration	Conditions
96 Hr LC50 Pimephales promelas	>5000 mg/L	

PROGUARD RAILROAD DIESEL ENGINE OILS

MATERIAL SAFETY DATA SHEET FOR UDA

Residual oils (petroleum), solvent dewaxed (64742-62-7)

Test & Species

Conditions

96 Hr LC50 Pimephales promelas >5000 mg/L

Lubricating oils (petroleum), C>25, hydrotreated bright stock (72623-83-7)

Test & Species

Conditions

96 Hr LC50 Lepomis macrochirus >10000 mg/L

Petroleum distillates, hydrotreated heavy paraffinic (64742-54-7)

Test & Species

Conditions

96 Hr LC50 Pimephales promelas >5000 mg/L

Petroleum distillates, solvent-refined heavy paraffinic (64741-88-4)

Test & Species

Conditions

96 Hr LC50 Oncorhynchus mykiss >5000 mg/L

PERSISTENCE/DEGRADABILITY: No information available for the product.

BIOACCUMULATION/ACCUMULATION: No information available for the product.

MOBILITY IN ENVIRONMENTAL MEDIA: No information available for the product.

OTHER ADVERSE EFFECTS: No additional information available.

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

VOLATILE ORGANIC COMPOUNDS: Negligible

SECTION 13: DISPOSAL CONSIDERATIONS

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

USEPA WASTE CODE(S): These products, if discarded, are not expected to be a characteristic or listed hazardous waste. If recycled in the USA, they must be managed in accordance with 40 CFR Part 279. Processing, use, or contamination by the user may change the waste code(s) applicable to the disposal of these products.

PROGUARD RAILROAD DIESEL ENGINE OILS

MATERIAL SAFETY DATA SHEET

SECTION 14: TRANSPORT INFORMATION

DOT: **Shipping Name:** Not regulated as a hazardous material.

TDG: **Shipping Name:** Not regulated as a dangerous good.

EMERGENCY RESPONSE GUIDE NUMBER: Reference *North American Emergency Response Guidebook*

SECTION 15: REGULATORY INFORMATION

USA REGULATIONS

SARA SECTIONS 302 AND 304: Based on the ingredient(s) listed in **SECTION 3**, these products do not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA SECTIONS 311 AND 312: These products pose the following health hazard(s) as defined in 40 CFR Part 370 and are subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA):
Immediate (Acute) Health Hazard

SARA SECTION 313: These products do not contain "toxic" chemical(s) subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

CERCLA: Based on the ingredient(s) listed in **SECTION 3**, this product does not contain any "hazardous substances" listed pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.

TSCA: All the components of these products are listed on, or are automatically included as "naturally occurring chemical substances" on, or are exempted from the requirement to be listed on, the TSCA Inventory.

PROGUARD RAILROAD DIESEL ENGINE OILS

MATERIAL SAFETY DATA SHEET

CALIFORNIA: These products 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. WARNING: These chemicals are known to the State of California to cause cancer. Our testing of these products indicates that these chemicals are not always detectable.

These products do not contain detectable amounts of any chemical known to the State of California to cause birth defects or other reproductive harm.

CANADIAN REGULATIONS

These products have been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by the CPR.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA): All the components of these products are listed on, or are automatically included as "substance occurring in nature" on, or are exempted from the requirements to be listed on, the Canadian Domestic Substances List (DSL).

SECTION 16. OTHER INFORMATION

REVISION INFORMATION: Regulatory update, updated to ANSI Z400.1-2004 format. This MSDS has been revised in the following sections: Section 1 (Dates), Section 2 (Composition updated), Section 3 (switched to Emergency Overview), Section 4 (Phone Numbers), Section 5 (Fire Fields), Section 8 (Exposure Limits added), Section 11 (Toxicology fields updated), Section 12 (Ecotoxicity and VOC Information, fields updated), Section 16 (Revision Information).

LABEL/OTHER INFORMATION: Not available

User assumes all risks incident to the use of this (these) product(s). To the best of our knowledge, the information contained herein is accurate. However, Lyden Oil assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either express or implied, or merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers. The data contained on this sheet apply to the product(s) as supplied to the user.