

SAFETY DATA SHEET

Spectrum
CORPORATION



1. IDENTIFICATION

1.1. PRODUCT IDENTIFIER USED ON LABEL:

1.1.1. MERCURY PREMIUM GEAR OIL

1.2. OTHER MEANS OF IDENTIFICATION:

1.2.1. Premium Gear Oil

1.2.2. Marine Grade Gear Lube

1.2.3. 92 858058K01; 92 858059K01; 92 802844Q02; 92 858058Q01; 92 858061Q01; 92 858062Q01

1.3. RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE;

1.3.1. PETROLEUM LUBRICATING OIL

1.3.2. Gear Oil

1.4. NAME, ADDRESS, AND TELEPHONE NUMBER OF THE CHEMICAL MANUFACTURER, IMPORTER, OR OTHER RESPONSIBLE PARTY:

1.4.1.

Mercury Marine

41-71 Bessemer Drive Dandenong South
Vic Australia
3175

Product Information

Information: +61 3 9791 5822

1.5. EMERGENCY PHONE NUMBER:

1.5.1.

Emergency Response

Chemtrec Australia (Sydney): +(61) 290372994 (24 hours)

2. HAZARD(S) IDENTIFICATION

2.1. Signal word, hazard statement(s), symbol(s) and precautionary statement(s) in accordance with paragraph (f) of §1910.1200

2.1.1. Inhalation: At elevated temperatures or in enclosed spaces, product mist or vapors may irritate the mucous membranes of the nose, the throat, bronchi, and lungs.

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- 2.1.2. Eye Contact: This product can cause transient mild eye irritation with short-term contact with liquid sprays or mists. Symptoms include stinging, watering, redness, and swelling.
- 2.1.3. Skin Contact: This material can cause mild skin irritation from prolonged or repeated skin contact. Injection under the skin can cause inflammation and swelling. Injection of pressurized hydrocarbons can cause severe, permanent tissue damage. Initial symptoms may be minor. Injection of petroleum hydrocarbons requires immediate medical attention.
- 2.1.4. Ingestion: If swallowed, large volumes of material can cause generalized depression, headache, drowsiness, nausea, vomiting and diarrhea. Smaller doses can cause a laxative effect.
- 2.1.5. Chronic Health Effects Summary: This product contains a petroleum-based mineral oil. Prolonged or repeated skin contact can cause mild irritation and inflammation characterized by drying, cracking, (dermatitis) or oil acne. Repeated or prolonged inhalation of petroleum-based mineral oil mists at concentrations above applicable workplace exposure levels can cause respiratory irritation or other pulmonary effects.
- 2.1.6. Conditions aggravated by exposure: Disorders of the following organs or organ systems that may be aggravated by significant exposure to this material or its components include: Skin
- 2.1.7. Target Organs: May cause damage to the following organs: skin.
- 2.1.8. Carcinogenic Potential: This product is not known to contain any components at concentrations above 0.1% which are considered carcinogenic by OSHA, IARC or NTP.

3. Composition/ information on ingredients

3.1. The chemical name and concentration (exact percentage) or concentration ranges of all ingredients which are classified as health hazards in accordance with paragraph (d) of §1910.1200

3.1.1.

COMPONENTS	CAS Number	EU Number	Concentration (%)	R-Phrase / S-Phrase
Highly-refined mineral oils (petroleum)	Various	Various	60-100	**
Proprietary Ingredients	Proprietary	Proprietary	1-5	**

- * (Note L) The classification as a carcinogen need not apply the substance contains less than 3 %DMSO extract as measured by IP 346
- ** This substance is not listed in a priority list (as foreseen under Council Regulation (EEC) No 793/93 on the evaluation and control of the risks of existing substances.).

4. FIRST AID MEASURES

4.1. Inhalation:

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4.1.1. Vaporization is not expected at ambient temperatures. This material is not expected to cause inhalation-related disorders under anticipated conditions of use. In case of overexposure, move the person to fresh air.

4.2. Eye Contact:

4.2.1. Check for and remove contact lenses. Flush eyes with cool, clean, low-pressure water while occasionally lifting and lowering eyelids. Seek medical attention if excessive tearing, redness, or pain persists.

4.3. Skin Contact:

4.3.1. If burned by hot material, cool skin by quenching with large amounts of cool water. For contact with product at ambient temperatures, remove contaminated shoes and clothing. Wipe off excess material. Wash exposed skin with mild soap and water. Seek medical attention if tissue appears damaged or if pain or irritation persists. Thoroughly clean contaminated clothing before reuse. Clean or discard contaminated leather goods. If material is injected under the skin, seek medical attention immediately.

4.4. Ingestion:

4.4.1. Do not induce vomiting unless directed to by a physician. Do not give anything to drink unless directed to by a physician. Never give anything by mouth to a person who is not fully conscious. If significant amounts are swallowed or irritation or discomfort occurs, seek medical attention immediately.

4.5. Note to Physician

4.5.1. INGESTION: The viscosity range of the product(s) represented by this MSDS is greater than 100 SUS at 100°F. Careful gastric lavage may be considered to evacuate large quantities of material.

4.6. Take proper precautions to ensure your own health and safety before attempting rescue or providing first aid. For more specific information, refer to Exposure Controls and Personal Protection in Section 8 of this MSDS.

5. FIRE FIGHTING MEASURES

5.1. PROTECTION OF FIRE FIGHTERS:

5.1.1. Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies.

5.2. Extinguishing Media:

5.2.1. Use dry chemical, foam, carbon dioxide or water fog. Water or foam may cause frothing. Carbon dioxide and inert gas can displace oxygen. Use caution when applying carbon dioxide or inert gas in confined spaces.

5.3. NFPA Flammability Classification:

5.3.1. NFPA Class-IIIB combustible material.

5.4. Hazardous Combustion Products:

5.4.1. Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons and oxides of sulfur and/or nitrogen.

5.5. Special Properties:

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5.5.1. This material will release vapors when heated above the flash point temperature that can ignite when exposed to a source of ignition. In enclosed spaces, vapors can ignite with explosive force. Mists or sprays may burn at temperatures below the flash point.

6. ACCIDENTAL RELEASE MEASURES

6.1. Spill Procedures:

6.1.1. Do not touch damaged containers or spilled material unless wearing appropriate protective equipment. Slipping hazard; do not walk through spilled material. Stop leak if you can do so without risk. For small spills, absorb or cover with dry earth, sand, or other inert non-combustible absorbent material and place into waste containers for later disposal. Contain large spills to maximize product recovery or disposal. Prevent entry into waterways or sewers. In urban area, cleanup spill as soon as possible. In natural environments, seek cleanup advice from specialists to minimize physical habitat damage. This material will float on water. Absorbent pads and similar materials can be used. Comply with all laws and regulations.

6.2. Precautionary Measures:

6.2.1. Take proper precautions to ensure your own health and safety before attempting spill control or clean-up. For more specific information, Exposure Controls and Personal Protection in Section 8 and Disposal Considerations in Section 13 of this MSDS.

7. HANDLING AND STORAGE

7.1. Handling:

7.1.1. Keep containers closed and do not handle or store near heat, sparks, or any other potential ignition sources. Avoid contact with oxidizing agents. Never siphon by mouth. Avoid contact with eyes, skin, and clothing. Avoid contamination and extreme temperatures.

7.1.2. Empty containers may contain product residues that can ignite with explosive force. Drain and purge equipment, as necessary, to remove material residues. Follow proper entry procedures, including compliance with 29 CFR 1910.146 prior to entering confined spaces such as tanks or pits. Use appropriate respiratory protection when concentrations exceed any established occupational exposure level (See Section 8). Promptly remove contaminated clothing. Wash exposed skin thoroughly with soap and water after handling.

7.1.3. Do not pressurize, cut, weld, braze solder, drill, grind or expose containers to flames, sparks, heat or other potential ignition sources. Protect containers against physical damage. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling or disposing of empty containers and/or waste residues of this product.

7.2. Storage:

7.2.1. Keep container tightly closed. Store in a cool, dry, well-ventilated area. Store only in approved containers. Do not store with strong oxidizing agents. Do not store at elevated temperatures. Avoid

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storing product in direct sunlight for extended periods of time. Storage area must meet OSHA requirements and applicable fire codes. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling or disposing of empty containers or waste residues of this product.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1. Engineering Controls:

8.1.1. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits (see below). An eye wash station and safety shower should be located near the work-station.

8.2. Personal Protective Equipment:

8.2.1. Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to OSHA regulations. The following pictograms represent the minimum requirements for personal protective equipment. For certain operations, additional PPE may be required.

8.3. Eye Protection:

8.3.1. Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. Wear goggles if splashing or spraying is anticipated. Wear goggles and face shield if material is heated above 125°F (51°C). Have suitable eye wash water available.

8.4. Hand Protection:

8.4.1. None required for incidental contact. Use gloves constructed of chemical resistant materials such as heavy nitrile rubber if frequent or prolonged contact is expected. Use heat-protective gloves when handling product at elevated temperatures.

8.5. Body Protection:

8.5.1. Use clean protective clothing if splashing or spraying conditions are present. Protective clothing may include long-sleeve outer garment, apron, or lab coat. If significant contact occurs, remove oil-contaminated clothing as soon as possible and promptly shower. Launder contaminated clothing before reuse or discard. Wear heat protective boots and protective clothing when handling material at elevated temperatures.

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8.6. Respiratory Protection:

8.6.1. The need for respiratory protection is not anticipated under normal use conditions and with adequate ventilation. If elevated airborne concentrations above applicable workplace exposure levels are anticipated, a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter should be used. Protection factors vary depending upon the type of respirator used. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134).

8.7. General Comments:

8.7.1. Use good personal hygiene practices. Wash hands and other exposed skin areas with plenty of mild soap and water before eating, drinking, smoking, use of toilet facilities, or leaving work. DO NOT use gasoline, kerosene, solvents or harsh abrasives as skin cleaners. Since specific exposure standards/control limits have not been established for this product, the "Oil Mist, Mineral" exposure limits shown below are suggested as minimum control guidelines.

8.8. Occupational Exposure Guidelines

8.8.1. Substance: Oil, Mineral (mist)

8.8.2. Applicable Exposure Levels:

8.8.2.1. ACGIH (United States)

8.8.2.1.1. TWA: 5mg/m³

8.8.2.1.2. STEL 10mg/m³

8.8.2.2. OSHA (United States)

8.8.2.2.1. TWA 5 mg/m³

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1.

9.1.1. Vapor Pressure	<0.001kPA (<.01 mm Hg)(at 20°C)
9.1.2. Specific Gravity	0.89 (Water=1)
9.1.3. Water Solubility:	Negligible solubility in cold water
9.1.4. Boiling Point:	Not available
9.1.5. Vapor Density (Air=1):	>1
9.1.6. Odor:	Petroleum
9.1.7. Physical State	Liquid
9.1.8. Color	Dark amber
9.1.9. Viscosity at 100°C CST:	16.61

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9.1.10. **Viscosity at 40°C CST** 157

9.1.11. **Flash Point:** Closed Cup: 180°C (356°F) Open Cup: 228°C (442.4°F)

10. STABILITY AND REACTIVITY

10.1. Chemical Stability:

10.1.1. Stable

10.2. Materials Incompatibility:

10.2.1. Oxidizing materials.

10.3. Hazardous Polymerization:

10.3.1. Not expected to occur.

10.4. Conditions to Avoid:

10.4.1. Keep away from extreme heat, sparks, open flame, and strongly oxidizing conditions.

10.5. Hazardous Decomposition Products

10.5.1. No additional hazardous decomposition products were identified other than the combustion products identified in Section 5 of this MSDS.

11. TOXICOLOGY INFORMATION

11.1. Distillates (petroleum), hydrotreated light

11.1.1. ORAL (LD50): Acute: >5000 mg/kg [Rat].

11.1.2. DERMAL (LD50): Acute: >2000 mg/kg [Rabbit].

11.1.2.1. Studies on laboratory animals have associated similar materials with eye and respiratory tract irritation. Repeated exposure to elevated concentrations of hydrocarbon solvents can produce a variety of transient CNS effects (e.g., dizziness, headache, narcosis, etc). Studies on laboratory animals have shown similar materials to cause skin irritation after repeated or prolonged contact. Repeated direct application of similar materials to the skin can produce defatting dermatitis and kidney damage in laboratory animals. The most common effects observed in repeated dose animal studies with mineral spirits are kidney changes that are consistent with an alpha 2u-globulin-mediated process that is not regarded as relevant to humans. Certain studies have reported effects in the liver as well as hematological or urine chemistry changes. In general, these effects have not to been shown to be dose-related.

11.2. Highly-refined petroleum lubricant oils:

11.2.1. ORAL (LD50): Acute: >5000 mg/kg [Rat].

11.2.2. DERMAL (LD50): Acute: >2000 mg/kg [Rabbit].

11.2.2.1. Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipid granuloma formation and lipid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects. In long term studies (up to two years) no carcinogenic effects have been reported in any animal species tested.

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12. ECOLOGICAL INFORMATION

12.1. Environmental Fate

12.1.1. An environmental fate analysis is not available for this specific product. Plants and animals may experience harmful or fatal effects when coated with petroleum products. Petroleum-based (mineral) lubricating oils normally will float on water. In stagnant or slow-flowing waterways, an oil layer can cover a large surface area. As a result, this oil layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway may be sufficient to cause a fish kill or create an anaerobic environment.

12.2. Ecotoxicity

12.2.1. Analysis for ecological effects has not been conducted on this product. However, if spilled, this product and any contaminated soil or water may be harmful to human, animal, and aquatic life. Also, the coating action associated with petroleum and petroleum products can be harmful or fatal to aquatic life and waterfowl.

13. DISPOSAL CONSIDERATIONS

13.1. Waste Disposal:

13.1.1. Conditions of use may cause this material to become a "hazardous waste", as defined by federal or state regulations. It is the responsibility of the user to determine if the material is a "hazardous waste" at the time of disposal. Transportation, treatment, storage, and disposal of waste material must be conducted in accordance with RCRA regulations (see 40 CFR 260 through 40 CFR 271). State and/or local regulations may be more restrictive. Contact your regional US EPA office for guidance concerning case specific disposal issues. Empty drums and pails retain residue. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose this product's empty container to heat, flame, or other ignition sources. DO NOT attempt to clean it. Empty drums and pails should be drained completely, properly bunged or sealed, and promptly sent to a reconditioner.

13.1.2. Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition.

14. TRANSPORTATION INFORMATION

The shipping description below may not represent requirements for all modes of transportation, shipping methods or locations outside of the United States.

14.1. ROAD AND RAIL

14.1.1. DOT: NOT REGULATED

14.2. VESSEL

14.2.1. IMDG: NOT REGULATED

14.3. AIR

14.3.1. IATA: NOT REGULATED

15. REGULATORY INFORMATION

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15.1. TSCA Inventory

15.1.1. This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.

15.2. SARA 302/304 Emergency Planning and Notification

15.2.1. The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.

15.3. SARA 311/312 Hazard Identification

15.3.1. The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories: No SARA 311/312 hazard categories identified.

15.4. SARA 313 Toxic Chemical Notification and Release Reporting

15.4.1. This product contains the following components in concentrations above *de minimis* levels that are listed as toxic chemicals in 40 CFR Part 372 pursuant to the requirements of Section 313 of SARA: No components were identified.

15.5. CERCLA

15.5.1. The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. This product or refinery stream is not known to contain chemical substances subject to this statute. However, it is recommended that you contact state and local authorities to determine if there are any other reporting requirements in the event of a spill.

15.6. Clean Water Act (CWA)

15.6.1. This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.

15.7. California Proposition 65:

15.7.1. This material may contain components which are known to the State of California to cause cancer, birth defects or other reproductive harm, and may be subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):

15.7.1.1. Naphthalene: 0.00059%

15.7.1.2. Aniline: 0.00023%

15.7.1.3. Ethyl acrylate: 0.00011%

15.7.1.4. Toluene: 6e-005%

15.8. New Jersey Right-to-Know Label

15.8.1. Petroleum Oil (Gear Oil)

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16. OTHER INFORMATION

16.1.

HAZARD RANKINGS			
HMIS		NFPA	
HEALTH HAZARD	1	HEALTH HAZARD	1
FIRE HAZARD	1	FIRE HAZARD	1
PHYSICAL HAZARD	0	INSTABILITY/REACTIVITY	0

16.2. **Date of preparation:** Novemeber 4, 2013

16.3. **MANUFACTURER DISCLAIMER:**

16.3.1. *The data presented herein is based upon tests and information, which we believe to be reliable. However, users should make their own investigations to determine the suitability of the information for their particular purpose*