

Material Safety Data Sheet



SYNTHETIC GEAR OILS 75W-90, 75W-140, 80W-140

MSDS INFORMATION

WARNING:

Oil injected into the skin from high-pressure leaks can cause severe injury.
Most damage occurs during the first few hours.
Seek medical attention immediately.
Surgical removal of oil may be necessary.
Spills may create a slipping hazard.

Gear Oils

SECTION 1: PRODUCT IDENTIFICATION

GEAR OILS MADE FROM EXXON PAO BASE STOCK

CHEMTREC Emergency
(United States Only)
(800) 424-9300

SECTION 2: COMPOSITION

Component Name(s)

POLYALPHAOLEFIN

Proprietary Ingredients Proprietary Mixture <10

Zinc and Zinc Compounds 4259-15-8 <5

CAS Registry No. Concentration (%)

SECTION 3: HAZARDS IDENTIFICATION

Also see Emergency Overview and Hazard Ratings on the top of Page 1 of this MSDS.
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.

No significant adverse health effects are expected to occur upon short-term exposure.

This product can cause transient mild eye irritation with short-term contact with liquid sprays or mists. Symptoms include stinging, watering, redness, and swelling.

This material can cause mild skin irritation from prolonged or repeated skin contact.

Injection under the skin can cause inflammation and swelling.

Disorders of the following organs or organ systems that may be aggravated by significant exposure to this material or its components include: Skin

If swallowed, large volumes of material can cause generalized depression, headache, drowsiness, nausea, vomiting and diarrhea. Smaller doses can cause a laxative effect. If aspirated into the lungs, liquid can cause lung damage.

This product is not known to contain any components at concentrations above 0.1% which are considered carcinogenic by OSHA, IARC or NTP.

Inhalation 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.

SECTION 4: FIRST AID MEASURES

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

Notes to Physician

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.

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. Discard contaminated leather goods. If material is injected under the skin, seek medical attention immediately.

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. Seek medical attention immediately.

SKIN: In the event of injection in underlying tissue, immediate treatment should include extensive incision, debridement and saline irrigation. Inadequate treatment can result in ischemia and gangrene. Early symptoms may be minimal.

INGESTION: The viscosity range of the product(s) represented by this MSDS is greater than 100 SUS at 100°F. There is a low risk of aspiration upon ingestion. Careful gastric lavage or emesis may be considered to evacuate large quantities of material.

NFPA Class-IIIB combustible material.

Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons and oxides of

sulfur, phosphorus, zinc and/or nitrogen.

Closed cup: 211°C (412°F). (Pensky-Martens.) Open cup: 272°C (522°F) (Cleveland.).

No data.

Use dry chemical, foam, Carbon Dioxide or water fog.

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.

This material can burn but will not readily ignite. 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, heated vapor can ignite with explosive force. Mists or sprays may burn at temperatures below the flash point.

Special Properties

SECTION 5: FIRE FIGHTING MEASURES

Upper Flammable Limit No data.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Take proper precautions to ensure your own health and safety before attempting spill control or clean-up. For more specific information, refer to the Emergency Overview on Page 1, Exposure Controls and Personal Protection in Section 8 and Disposal Considerations in Section 13 of this MSDS.

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.

Storage Keep container closed. Do not store with strong oxidizing agents. Do not store at elevated temperatures. Avoid storing product in direct sunlight for extended periods of time. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling or disposing of empty containers or waste residues of this product.

Avoid contamination and extreme temperatures to minimize product degradation. Empty containers may contain product residues that can ignite with explosive force. Do not pressurize, cut, weld, braze solder, drill, grind or expose containers to flames, sparks, heat or other potential ignition sources. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling or disposing of empty containers and/or waste residues of this product.

SECTION 7: HANDLING AND STORAGE

Engineering Controls

Personal Protective

Equipment

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.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. Wear goggles and/or face shield 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.

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.

Eye Protection

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.

Hand Protection

Body Protection

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.

Occupational Exposure Guidelines

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).

Respiratory Protection

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.

General Comments

Substance Applicable Workplace Exposure Levels

Oil Mist, Mineral ACGIH (United States).

TWA: 5 mg/m³ 8 hour(s).

STEL: 10 mg/m³ 15 minute(s).

OSHA (United States).

TWA: 5 mg/m³ 8 hour(s).

Not available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (TYPICAL)

Negligible solubility in cold water.

Additional Properties

Gravity, °API (ASTM D287) = 27.0 @ 60° F

Density = 7.43 Lbs/gal.

Viscosity (ASTM D2161) = AP 500 SUS @ 100° F

Viscosity 99

(cSt @ 40°C)

Physical State Liquid. Color Amber. Odor Mild petroleum odor

pH Not Applicable.

Flash Point Closed cup: 211°C (412°F). (Pensky-Martens.) Open cup: 272°C (522°F)
(Cleveland.).

Conditions to Avoid

Chemical Stability

Hazardous

Decomposition

Products

Stable.

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

SECTION 10: STABILITY AND REACTIVITY

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

Materials

Incompatibility

Hazardous Polymerization Not expected to occur.

Strong oxidizers.

SECTION 11: TOXICOLOGICAL INFORMATION

For other health-related information, refer to the Emergency Overview on Page 1 and the Hazards Identification

in Section 3 of this MSDS.

Toxicity Data Distillates, petroleum, solvent-refined heavy paraffinic :

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

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

SECTION 12: ECOLOGICAL INFORMATION

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.

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.

SECTION 13: DISPOSAL CONSIDERATIONS

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 the RCRA/Superfund Hotline at (800) 424-9346 or 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.

Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is 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.

SECTION 14: TRANSPORT INFORMATION

Not regulated.

Placard(s)

Proper Shipping Name Not regulated.

Packing Group(s) Not applicable.

Reportable Quantity A Reportable Quantity (RQ) has not been established for this material.

Hazard Class

UN/NA Number Not regulated.

US DOT Status

MARPOL III Status

HAZMAT STCC No.

Emergency Response

Guide No.

Not a DOT "Marine

Pollutant" per 49 CFR
171.8.

2911415

Not applicable.

Not regulated by the U.S. Department of Transportation as a hazardous material.

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

SECTION 15: REGULATORY INFORMATION

**TSCA Inventory
SARA 302/304
Emergency Planning
and Notification
SARA 311/312 Hazard
Identification**

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:

This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory. No SARA 311/312 hazard categories identified.

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.

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. Chemical substances present in this product or refinery stream that may be subject to this statute are:

Zinc and Zinc Compounds, Concentration: <2%

**SARA 313 Toxic
Chemical Notification
and Release Reporting**

**CERCLA
California
Proposition 65**

This material may contain the following 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):

Toluene: <0.002%

Ethyl acrylate: 0.0001%

Additional Regulatory

Remarks

**Clean Water Act
(CWA)**

New Jersey

Right-to-Know Label

No additional regulatory remarks.

Petroleum Oil

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:

Zinc and Zinc Compounds, Concentration: <2%

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](http://www.epa.gov/nr).

SECTION 16: OTHER INFORMATION

DISCLAIMER OF LIABILITY

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****** END OF MSDS ******