Safety Data Sheet

Chevron Oronite

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

EXPERIMENTAL LUBRICANT FINISHED OIL (R&D USE ONLY)

Product Use: Experimental Lubricant

Company Identification
Chevron Oronite Company LLC
4800 Fournace Place
Bellaire, TX 77401
United States of America

Transportation Emergency Response
Asia: Chevron Emergency Information Centre +(1) 510-231-0623
Australia: 1 800 009 010
China: (+86) 138 113 09746
Europe: Oronite SA - Gonfreville Plant +33 2 35 25 55 00
North America: CHEMTREC (800) 424-9300 or (703) 527-3887
South America: Chevron Oronite Brasil Ltda (24 hours) 55 11 4478-1200

Health Emergency
USA: International collect calls accepted. (800) 231-0623 or (510) 231-0623

Product Information
MSDS Requests: (877) 512-7200
Technical Information: (877) 512-7200

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SECTION 2 HAZARDS IDENTIFICATION

CLASSIFICATION: Chronic aquatic toxicant: Category 3.

Environmental Hazards: Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS:
Prevention: Avoid release to the environment.
Disposal: Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

HAZARDS NOT OTHERWISE CLASSIFIED: Not Applicable

SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT

without proper protective equipment, including self-contained breathing apparatus.
Combustion Products: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion. Combustion may form oxides of: Phosphorus, Zinc, Sulfur, Calcium.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Protective Measures: Eliminate all sources of ignition in vicinity of spilled material.
Spill Management: Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. If heated material is spilled, allow it to cool before proceeding with disposal methods.
Reporting: Report spills to local authorities as appropriate or required.

SECTION 7 HANDLING AND STORAGE

Precautionary Measures: Do not get in eyes, on skin, or on clothing. If adequate engineering controls are used, short term activities such as loading, unloading and in-line blending may occur at temperatures ranging from 80-85°C (176-185°F). During shipment by railcar or tank truck, loading temperatures as high as 80-85°C (176-185°F) may be used and are expected to drop to 66°C (150°F) or lower within 7 days. Storage temperatures for up to 2 weeks should not exceed 66°C (150°F). The recommended long-term (2 weeks or more) storage temperature is ambient to 45°C (113°F) maximum. Avoid contact of heated material with eyes, skin, and clothing. Wash thoroughly after handling.
General Handling Information: The recommended reheating medium is hot water or regulated low pressure steam. Care must be taken not to exceed the temperatures stated above when reheating this material in order to avoid decomposition that releases hazardous fumes. Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.
Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids', National Fire Protection Association (NFPA 77, 'Recommended Practice on Static Electricity', and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents'.
Container Warnings: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. 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. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL CONSIDERATIONS:
Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and

Freezing Point: No data available
Melting Point: No data available
Specific Gravity: <1 @ 15.6°C (60°F) (Estimated)
Density: No data available
Viscosity: >20 cSt @ 40°C (104°F) (Estimated)
Coefficient of Therm. Expansion / °F: No data available
Evaporation Rate: No data available
Decomposition temperature: No Data Available
Octanol/Water Partition Coefficient: No data available

FLAMMABLE PROPERTIES:
Flammability (solid, gas): No Data Available

Flashpoint: (Cleveland Open Cup) > 200 °C (> 392 °F)
Autoignition: No data available
Flammability (Explosive) Limits (% by volume in air): Lower: No data available Upper: No data available

SECTION 10 STABILITY AND REACTIVITY

Reactivity: May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
Chemical Stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Conditions to Avoid: Do not exceed handling and storage temperatures listed in MSDS Section 7 (Handling and Storage).
Incompatibility With Other Materials: Not applicable
Hazardous Decomposition Products: None known (None expected)
Hazardous Polymerization: Hazardous polymerization will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects
Serious Eye Damage/Irritation: The eye irritation hazard is based on evaluation of data for product components.The eye irritation hazard is based on an evaluation of the data for similar products. These data show that a specific component present in this product antagonizes (or decreases the severity of) the eye irritation of the ZnDTP.

Skin Corrosion/Irritation: The skin irritation hazard is based on evaluation of data for product components.

Skin Sensitization: The skin sensitization hazard is based on evaluation of data for product components.

Acute Dermal Toxicity: The acute dermal toxicity hazard is based on evaluation of data for product components.

Acute Oral Toxicity: The acute oral toxicity hazard is based on evaluation of data for product components.

Acute Inhalation Toxicity: The acute inhalation toxicity hazard is based on evaluation of data for product components.

SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

DOT Shipping Description: NOT REGULATED AS HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER 49 CFR

IMO/IMDG Shipping Description: NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER THE IMDG CODE

ICAO/IATA Shipping Description: NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER ICAO

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:
Not applicable

SECTION 15 REGULATORY INFORMATION

EPCRA 311/312 CATEGORIES:

1. Immediate (Acute) Health Effects: NO
2. Delayed (Chronic) Health Effects: NO
3. Fire Hazard: NO
4. Sudden Release of Pressure Hazard: NO
5. Reactivity Hazard: NO

REGULATORY LISTS SEARCHED:

01-1=IARC Group 1	03=EPCRA 313
01-2A=IARC Group 2A	04=CA Proposition 65
01-2B=IARC Group 2B	05=MA RTK
02=NTP Carcinogen	06=NJ RTK
	07=PA RTK

The following components of this material are found on the regulatory lists indicated.
Zinc alkyl dithiophosphate 03, 06

For research and development purposes only. May contain substances not on the TSCA inventory. To be used only under the direct supervision of a technically qualified individual.

SECTION 16 OTHER INFORMATION

NFPA RATINGS: Health: 0 Flammability: 1 Reactivity: 0

HMIS RATINGS: Health: 0 Flammability: 1 Reactivity: 0

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商品説明書

本品は潤滑油であり、主に４サイクルエンジンの潤滑油として使用されるものです。

一般性状

比重	:	０．８７
引火点	:	１８０℃以上

既存化学物質番号

７－４９	:	アルキル（又はアルケニル）（C_{3-200}）コハク酸 ポリアルキレン（C_{12-10}）ポリイミド
３－６４８	:	過塩基性硫化アルキルフェノールバリウム塩 （アルキル基C_{8-50}）（又はカルシウム塩
９－１７３２	:	石油スルホン酸及びその塩（Ｃａ，Ｍｇ，Ｂａ，Ｚｎ）
３－１９４９	:	アルキル（C_{10-50}）ベンゼンスルホン酸塩 （Ｃａ，Ｎａ，Ｋ，Ｍｇ，Ｂａ）
２－２９４５	:	ジアルキル（C_{3-6}）ジチオリン酸塩亜鉛
９－１６９２	:	石油留分又は残油の水素化精製又は分解により得られる 潤滑油基油