Safety Data Sheet



Oronite

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

EXPERIMENTAL LUBRICANT FINISHED OIL (R&D USE ONLY)

Product Usa: Experimental Lubricant and Albandary and Alba Company Identification Chevron Oronite Company LLC 4800 Fournace Place United States of America and an employeness and an employeness of America and an employeness of America and an employeness and an employeness of America and an employeness and an emplo

Transportation Emergency Response

Asia: Chevron Emergency Information Centre +(1) 510-231-0623 Australia: 1 800 009 010 mm limeters with the accommodate heart and the learning to the highest to saturate

China: (+86) 138 113 09746 (** a military endured for pC) Cherupon and requiring the heat appropriate modern and

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: THE INTERIOR INTERIOR INTERIOR TO BE THE PROPERTY OF THE PROPERTY OF

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 with much polynomial saldem owner applicable

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
Highly refined mineral oil (C15 - C50)	Mixture	< 95 %weight
Zinc alkyl dithiophosphate	68649-42-3	< 5 %weight

Revision Number: 9

Revision Date: SEPTEMBER 16 2014

1 of 8

EXPERIMENTAL LUBRICANT FINISHED OIL (R&D USE ONLY) SOS: 3361

compounds will be evolved when this material undergoes combustion. Combustion may form orders of Phosphorus, Zinc, Sulfuc Calcium.

SECTION & ACCIDENTAL HELEASE 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 other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since

Revision Number: 9
Revision Date: SEPTEMBER 16: 2014

EXPERIMENTAL LUBRICANT FINISHED OIL (R&D USE ONLY) FLAMMABLE PROPERTIES:

Flammability (solid, gas): No Data Available

Flashpoint: (Cleveland Open Cnp) > 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.

Acute Toxicity Estimate: Not Determined

Germ Cell Mutagenicity: The hazard evaluation is based on data for components or a similar material.

Carcinogenicity: The hazard evaluation is based on data for components or a similar material.

Reproductive Toxicity: The hazard evaluation is based on data for components or a similar material.

Specific Target Organ Toxicity - Single Exposure: The hazard evaluation is based on data for components or a similar material.

Specific Target Organ Toxicity - Repeated Exposure: The hazard evaluation is based on data for

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

Yr insport in bulk according to Armex II of MA 1801, 73/78 and the 180 coder - Not applicable

SECTION 15 REGULATORY INFORMATION

EPCRA 311/312 CATEGORIES:

Immediate (Acute) Health Effects:

2. Delayed (Chronic) Health Effects NO

3. Fire Hazard: NO

4. Sudden Release of Pressure Hazard: NO NO

Reactivity Hazard: NO 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 FITK

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:

Flammability:

Reactivity:

HMIS RATINGS:

Health: 0

Flammability: 1

Reactivity: 0

(0-Least, I-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, *- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

REVISION STATEMENT: This revision updates the following sections of this Safety Data Sheet: 1-16
Revision Date: SEPTEMBER 16, 2014

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value	TWA -	Time Weighted Average
STEL - Short-term Exposure Limit	PEL.	Permissible Exposure Limit
GHS - Globally Harmonized System	CAS -	Chemical Abstract Service Number
ACGIH - American Conference of Governmental Industrial Hygienists	IMO/IMDG Goods Code	- International Maritime Dangerous
API - American Petroleum Institute	SDS -	Safety Data Sheet

Revision Number: 9

Revision Date: SEPTEMBER 16, 2014

7 of 8

EXPERIMENTAL LUBRICANT
FINISHED OIL (R&D USE ONLY)
SDS: 3361