

Prod.Name: Chevron Axle Lubricant DEXRON LS
Manufacturer: Chevron Products Company
HMCS ID: 30036253
SUC: 04 - Metal Working Fluids and Lubricants

MATERIAL SAFETY DATA SHEET

Revision: 17.Feb.2010
Effective: 17.Feb.2010
Print Date: 10.Mar.2010
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1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT INFORMATION

Product Name: Chevron Axle Lubricant DEXRON LS

Product Code: 23418

Recommended Use:

Gear Lubricant

External Keys:

88863089 Distributable Material (Part #)
DEXRON Gear Primary Tradename - Distributable Material
Oil

MANUFACTURER INFORMATION

Manufacturer: Chevron Products Company

Address:

6001 Bollinger Canyon Road USA California 94583 San Ramon MAILING
6001 Bollinger Canyon Road USA California 94583 San Ramon Mailing

Communication Lines:

Phone 800-424-9300 Emergency (Chemtrec)
Phone 800-231-0623 Health emergency (Chevron Emergency Information Center)
Phone 703-527-3887 Emergency (Chemtrec international)
Phone 800-414-6737 MSDS requests
Phone 510-231-0623 Health emergency (Chevron Emergency Information Center)
Phone 800-LUBE-TEK Information
Internet www.chevronlubricants.com
Phone 800-424-9300
Phone 703-527-3887
Phone 510-231-5357
Phone 800-231-0623
Phone 510-231-0623

Comment:

Prepared by the Chevron Energy Technology Company, 100 Chevron Way, Richmond, California 94802.

2 INGREDIENT INFORMATION

FORMULATION

Ingredients:

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Prefix</u>	<u>Value</u>	<u>Unit</u>	<u>Exposure Limits</u>
HIGHLY REFINED MINERAL OIL (C15-C50)	989987-45-1	Range	1 - 5	% Wt	No
OLEFIN SULFIDE	989973-91-4	Range	3 - 7	% Wt	No
METHACRYLATE COPOLYMER	989906-41-4	Range	1 - 5	% Wt	No
LONG CHAIN ALKENYLAMINE	989981-91-9	Range	0.5 - 5	% Wt	No
Long-chain alkyl amine with substituted heteromonocyclic	989988-62-6	Range	0.5 - 1.5	% Wt	No
ALKYL POLYSULFIDES	989942-89-3	Range	0.1 - 1.5	% Wt	No

3 HAZARDS IDENTIFICATION

Hazards Overview:

EMERGENCY OVERVIEW

MAY CAUSE RESPIRATORY TRACT IRRITATION IF INHALED

CAUSES EYE IRRITATION

MAY CAUSE AN ALLERGIC SKIN REACTION

CAUSES SKIN IRRITATION

HARMFUL TO AQUATIC ORGANISMS. MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT

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3 HAZARDS IDENTIFICATION

Specific Hazards (Routes Of Exposure):

<u>Exposure Routes</u>	<u>Exposure Duration</u>	<u>Observation</u>
Eye Contact	Acute	Contact with the eyes causes irritation. Symptoms may include pain, tearing, reddening, swelling and impaired vision. Eye Irritation: The eye irritation hazard is based on evaluation of data for similar materials or product components.
Skin Contact	Acute	Contact with the skin causes irritation. Contact with the skin may cause an allergic skin reaction. Symptoms may include pain, itching, discoloration, swelling, and blistering. Not expected to be harmful to internal organs if absorbed through the skin. Skin Irritation: The skin irritation hazard is based on evaluation of data for similar materials or product components.
Ingestion	Acute	May be irritating to mouth, throat, and stomach. Symptoms may include pain, nausea, vomiting, and diarrhea.
Inhalation	Acute	Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.

Medical Conditions Aggravated By Exposure:

Not provided.

Additional Health Hazard Data:

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

4 FIRST AID MEASURES

First Aid By::

Inhalation	Move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if breathing difficulties continue.
Skin Contact	To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.
Eye Contact	Flush eyes with water immediately while holding the eyelids open. Remove contact lenses, if worn, after initial flushing, and continue flushing for at least 15 minutes. Get medical attention if irritation persists.
Ingestion	If swallowed, get medical attention. Do not induce vomiting. Never give anything by mouth to an unconscious person.

5 FIRE FIGHTING MEASURES

Product Flammability:

FIRE CLASSIFICATION:

OSHA Classification (29 CFR 1910.1200): Not classified by OSHA as flammable or combustible.

Flash Point:

> 320 °F CC 160 C. Min.

Explosive Limits:

Upper Explosive Limit (UEL) Not Applicable % by volume in air

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5 FIRE FIGHTING MEASURES

Explosive Limits:

Lower Explosive Limit Not % by volume in air
(LEL) Applicable

Autoignition Temperature:

Not
Available

Extinguishing Media:

Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

Fire and Explosion Hazards:

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.

Special Fire Fighting Procedures:

This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

6 ACCIDENTAL RELEASE MEASURES

PRECAUTIONS IN CASE OF ACCIDENTAL RELEASE

Personal Precautions:

Eliminate all sources of ignition in vicinity of spilled material.

Environmental Precautions:

Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

SPILL OR LEAK PROCEDURES

Recovery:

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.

7 HANDLING AND STORAGE

HANDLING

Safe Handling Procedures:

Do not get in eyes. Do not taste or swallow. Wash thoroughly after handling. Keep out of the reach of children. 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.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures:

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

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8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures:

should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment (PPE):

Eye Protection Wear protective equipment to prevent eye contact. Selection of protective equipment may include safety glasses, chemical goggles, face shields, or a combination depending on the work operations conducted.

Skin Protection Wear protective clothing to prevent skin contact. Selection of protective clothing may include apron, boots, and complete facial protection depending on operations conducted.

Hand Protection Wear protective gloves to prevent skin contact. Suggested materials for protective gloves include: 4H (PE/EVAL), Nitrile Rubber, Silver Shield, Viton.

Respiratory Protection Determine if airborne concentrations are below the recommended occupational exposure limits for jurisdiction of use. If airborne concentrations are above the acceptable limits, wear an approved respirator that provides adequate protection from this material, such as:
If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge. Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Physical State: Liquid
Color: No data available
Odor: Petroleum odor

PHYSICAL PROPERTIES

pH Value:

Not
Applicable

Changes of State:

Boiling Point > 599 °F 315 C.
Freezing point Not
Applicable

Vapor Pressure:

< 0.01 mm Hg Maximum @ 37.8 °C (100 °F)

Vapor Density:

> 1 Minimum. Air = 1

Specific Gravity:

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9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL PROPERTIES

Specific Gravity:

= 0.861 kg/l @ 15.6°C (60.1°F) (Typical)

Solubility:

water insoluble
hydrocarbon Soluble
solvents

Viscosity:

Viscosity = 14.5 cSt @ 100°C (212°F) (Typical)

Comment:

the data above are typical values and do not constitute a specification.

10 STABILITY AND REACTIVITY

STABILITY INFORMATION

Stability Under Normal Conditions: Stable

Incompatible Materials:

May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

Hazardous Polymerization:

will not occur.

HAZARDOUS DECOMPOSITION

Reactions:

<u>Type of Reaction</u>	<u>Reaction Products</u>
Thermal Decomposition	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.
Decomposition	None known (None expected)

11 TOXICOLOGICAL INFORMATION

SCIENTIFIC OBSERVATIONS

LETHAL LIMIT VALUES

Additional Information:

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

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

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

CLASSIFICATION OF INGREDIENTS

Carcinogenicity:

This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as: carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B). These oils have not been classified by the American Conference of Governmental Industrial Hygienists (ACGIH) as: confirmed human carcinogen (A1), suspected human carcinogen (A2), or confirmed animal carcinogen with unknown relevance to humans (A3).

No components of this material were found on the regulatory lists IARC Group 1, IARC Group 2A, IARC Group 2B, NTP Carcinogen

12 ECOLOGICAL INFORMATION

ENVIRONMENTAL IMPACT

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12 ECOLOGICAL INFORMATION

ENVIRONMENTAL IMPACT

Comment:

ENVIRONMENTAL FATE

Ready Biodegradability: This material is not expected to be readily biodegradable. The biodegradability of this material is based on an evaluation of data for the components or a similar material.

ECOTOXICITY

Comment:

This material is expected to be harmful to aquatic organisms and may cause long-term adverse effects in the aquatic environment. The ecotoxicity hazard is based on an evaluation of data for the components or a similar material.

13 DISPOSAL CONSIDERATIONS

Waste Disposal Information:

Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

14 TRANSPORT INFORMATION

DOT Information:

NOT HAZARDOUS BY U.S. DOT. ADR/RID HAZARD CLASS NOT APPLICABLE.

DOT Shipping Name:

PETROLEUM LUBRICATING OIL, NOT REGULATED AS A HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER 49 CFR

Comment:

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.

IMO/IMDG Shipping Description: PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER THE IMDG CODE (AMENDMENT 34-08)

ICAO/IATA Shipping Description: PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER ICAO TI OR IATA DGR

15 REGULATORY INFORMATION

LABELLING

Hazard Codes:

NFPA Health	1
NFPA Flammability	1
NFPA Reactivity	0
HMIS Health	2
HMIS Flammability	1
HMIS Reactivity	0

NATIONAL REGULATIONS

SARA 311/312: Yes

SARA 313: No

Immediate Health: Yes

Delayed Health: No

Fire: No

Sudden Pressure Release: No

Reactive: No

Other Regulation:

EPCRA 313:

No components of this material were found on the regulatory list.

TSCA:

All components comply with the chemical

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15 REGULATORY INFORMATION

NATIONAL REGULATIONS

Other Regulation:

inventory requirements.

STATE/LOCAL REGULATIONS

Comment:

No components of this material were found on the regulatory lists CA Proposition 65, MA RTK, NJ RTK, PA RTK

NEW JERSEY RTK CLASSIFICATION:

Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows:

PETROLEUM OIL (Gear oil)

16 OTHER INFORMATION

Comments:

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1)