# Safety Data Sheet



# **SECTION 1 IDENTIFICATION**

# **Delo Gear ESI SAE 80W-90, 85W-140**

Recommended Use: Axle Oil

Restrictions on Use: Consult supplier when used other than those specified.

Other means of identification: Delo Gear ESI SAE 80W-90 ISOCLEAN Certified, Delo Gear ESI SAE

85W-140 ISOCLEAN Certified

Product Number(s): 224503, 224504, 224605, 224606

**Company Identification** Chevron Products Company a division of Chevron U.S.A. Inc. 1400 Smith Street

Houston, TX 77002 United States of America www.chevronlubricants.com

## **Transportation Emergency Response**

CHEMTREC: (800) 424-9300 or (703) 527-3887

**Health Emergency** 

Chevron Emergency Information Center: Located in the USA. International collect calls accepted. (800)

231-0623 or (510) 231-0623

**Product Information** 

email: lubemsds@chevron.com

Product Information: 1 (800) 582-3835, LUBETEK@chevron.com

## SECTION 2 HAZARDS IDENTIFICATION

## **CLASSIFICATION:**

- · Acute aquatic toxicant: Category 3.
- Chronic aguatic 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 and container in accordance with applicable local, regional, national, and international regulations.

HAZARDS NOT OTHERWISE CLASSIFIED: Heating may release highly toxic and flammable hydrogen sulfide (H2S). Do not attempt rescue without supplied-air respiratory protection.

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## **SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS**

COMPONENTS	CAS NUMBER	AMOUNT
Highly refined mineral oil (C15 - C50)	Mixture	80 - 100 %weight
Borate dispersion	20786-60-1	0.5 - 1.5 %weight
Alkyl phosphate, alkenyl amine salts	Trade secret	0.1 - 1 %weight
Alkyl phosphorous acid esters	Trade secret	0.1 - 1 %weight

## SECTION 4 FIRST AID MEASURES

## **Description of first aid measures**

Eye: No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eves with water.

Skin: No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

Ingestion: No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

Inhalation: No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs. If exposure to hydrogen sulfide (H2S) gas is possible during an emergency, wear an approved, positive pressure air-supplying respirator. Move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

## Most important symptoms and effects, both acute and delayed **IMMEDIATE HEALTH EFFECTS**

Eye: Not expected to cause prolonged or significant eye irritation.

**Skin:** Contact with the skin is not expected to cause prolonged or significant irritation. Contact with the skin is not expected to cause an allergic skin response. Not expected to be harmful to internal organs if absorbed through the skin.

**Ingestion:** Not expected to be harmful if swallowed.

**Inhalation:** Not expected to be harmful if inhaled. 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. Hydrogen sulfide has a strong rotten-egg odor. However, with continued exposure and at high levels, H2S may deaden a person's sense of smell. If the rotten egg odor is no longer noticeable, it may not necessarily mean that exposure has stopped. At low levels, hydrogen sulfide causes irritation of the eyes, nose, and throat. Moderate levels can cause headache, dizziness, nausea, and vomiting, as well as coughing and difficulty breathing. Higher levels can cause shock, convulsions, coma, and death. After a serious exposure, symptoms usually begin immediately.

The U.S. National Institute for Occupational Safety and Health (NIOSH) considers air concentrations of hydrogen sulfide gas greater than 100 ppm to be Immediately Dangerous to Life and Health (IDLH).

#### **DELAYED OR OTHER HEALTH EFFECTS:** Not classified

## Indication of any immediate medical attention and special treatment needed

Note to Physicians: Administration of 100% oxygen and supportive care is the preferred treatment for poisoning by hydrogen sulfide gas. For additional information on H2S, see Chevron SDS No. 301.

# **SECTION 5 FIRE FIGHTING MEASURES**

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**EXTINGUISHING MEDIA:** Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish

UNSUITABLE EXTINGUISHING MEDIA: No data available

#### PROTECTION OF FIRE FIGHTERS:

Fire Fighting Instructions: This material will burn although it is not easily ignited. See Section 7 for proper handling and storage. For fires involving this material, do not enter any enclosed or confined fire space 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: Boron, Sulfur.

# **SECTION 6 ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment, and emergency procedures: Observe all relevant local and international regulations. Eliminate all sources of ignition in vicinity of spilled material. Keep out unnecessary and unprotected personnel. Persons entering the contaminated area to correct the problem or to determine whether it is safe to resume normal activities must comply with all instructions and wear appropriate personal protective equipment as indicated in Section 8.

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.

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

#### **SECTION 7 HANDLING AND STORAGE**

General Handling Information: Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

Precautionary Measures: Do not breathe gas. Wash thoroughly after handling. Keep out of the reach of children.

Unusual Handling Hazards: Toxic quantities of hydrogen sulfide (H2S) may be present in storage tanks and bulk transport vessels which contain or have contained this material. Persons opening or entering these compartments should first determine if H2S is present. See Exposure Controls/Personal Protection -Section 8. Do not attempt rescue of a person over exposed to H2S without wearing approved suppliedair or self-contained breathing equipment. If there is a potential for exceeding one-half the occupational exposure standard, monitoring of hydrogen sulfide levels is required. Since the sense of smell cannot be relied upon to detect the presence of H2S, the concentration should be measured by the use of fixed or portable devices.

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.

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

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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 2), applicable exposure limits, job activities, and other substances in the workplace when designing engineering controls and selecting personal protective equipment (PPE). If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, refer to PPE information below.

Factors that affect PPE include, but are not limited to: properties of the chemical, other chemicals which may contact the same PPE, physical requirements (fit & sizing, cut/puncture protection, dexterity, thermal protection, etc.), and potential allergic reactions to the PPE material. It is the responsibility of the user to read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances. Refer to appropriate CEN standards.

#### **ENGINEERING CONTROLS:**

Use in a well-ventilated area.

#### PERSONAL PROTECTIVE EQUIPMENT

**Eye/Face 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 chemical personal protective equipment (PPE) to prevent skin contact. Selection of chemical protective clothing should be performed by an Occupational Hygienist or Safety Professional and be based upon applicable standards (ASTM F739 or EN 374). Using chemical PPE depends upon operations conducted and may include chemical gloves, boots, chemical apron, chemical suit, and complete facial protection. **Refer to PPE manufacturers to obtain breakthrough time information to determine how long PPE can be used before it needs to be replaced.** Unless specific glove manufacturer data indicates otherwise, the below table is based upon available industry data to assist in the glove selection process and is intended to be used as reference only.

<b>Chemical Glove Material</b>	Thickness	Typical Breakthrough Time
	(mm)	(minutes)
Butyl	0.7	120
Neoprene	0.61	120
Nitrile	0.8	120
Polyvinyl Chloride (PVC)	1.1	120
Viton Butyl	0.3	120

**Respiratory Protection:** A site-specific risk assessment should be conducted by an Occupational Hygienist or a Safety Professional to determine the type and use of respiratory protective equipment. When a site-specific risk assessment determines that respiratory protection is required, use an approved respirator such as:

## Air purifying respirator -

If airborne concentration limits exceed the applicable occupational exposure limit, but are below the maximum use concentration.

Vapors only: organic vapor cartridge (filter type A3 per EN 529:2005).

Vapors and particulates (including generated mists): both an organic vapor cartridge & particulate filter (AP3 filter per EN 529:2005).

Refer to respirator manufacturers to obtain service life of cartridge / filter.

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# Positive pressure air-supplying respirator -

If airborne concentration limits exceed the maximum use concentration offered from an air purifying respirator.

If hydrogen sulfide (H2S) airborne concentrations exceed its applicable occupational exposure limits due to this material being heated. For more information on H2S, see Chevron SDS 301.

Refer to EN 529:2005, USA OSHA 1910.134, and/or other applicable local/regional/national/international standards for regulatory requirements.

## **Occupational Exposure Limits:**

Component	Agency	Form	TWA	STEL	Ceiling	Notation
Highly refined mineral oil (C15 - C50)	ACGIH	1	5 mg/m3	10 mg/m3		1
Highly refined mineral oil (C15 - C50)	OSHA Z-1	-	5 mg/m3			

Consult local authorities for appropriate values.

# **SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

Attention: the data below are typical values and do not constitute a specification.

Color: Brown to yellow Physical State: Liquid Odor: Petroleum odor

Odor Threshold: No data available

pH: Not Applicable

Vapor Pressure: No data available Relative Vapor Density: No data available Initial Boiling Point: No data available

**Solubility:** Soluble in hydrocarbons; insoluble in water

Freezing Point: No data available

Melting Point: No data available

Particle Characteristics: Not applicable

**Density:** 0.8882 kg/l - 0.9013 kg/l @ 15°C (59°F) (Typical)

**Kinematic Viscosity:** 13.7 mm2/s - 31.5 mm2/s @ 100°C (212°F)

Evaporation Rate: No data available

**Decomposition temperature:** No data available

Partition coefficient n-octanol/water (logarithmic value): No data available

**FLAMMABLE PROPERTIES:** 

Flammability (solid, gas): Not Applicable

Flashpoint: (Cleveland Open Cup) 180 °C (356 °F) (Minimum)

**Autoignition:** No data available

Flammability (Explosive) Limits (% by volume in air): Lower: Not Applicable Upper: Not

Applicable

# **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.

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Possibility of Hazardous Reactions: Hazardous polymerization will not occur. May react with strong

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

Incompatibility With Other Materials: Not applicable

**Hazardous Decomposition Products:** Hydrogen Sulfide (Elevated temperatures)

## SECTION 11 TOXICOLOGICAL INFORMATION

#### Information on toxicological effects

Serious Eye Damage/Irritation: The material is not considered an eye irritant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Skin Corrosion/Irritation: The material is not considered a skin irritant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

**Skin Sensitization:** The material is not considered a skin sensitizer. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Acute Dermal Toxicity: The material is not considered a dermal toxicant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Acute Oral Toxicity: The material is not considered an oral toxicant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Acute Inhalation Toxicity: The material is not considered an inhalation toxicant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components. Acute Toxicity Estimate: Not Determined

Germ Cell Mutagenicity: The material is not considered a mutagen. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Carcinogenicity: The material is not considered a carcinogen. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Reproductive Toxicity: The material is not considered a reproductive toxicant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Specific Target Organ Toxicity - Single Exposure: The material is not considered a target organ toxicant (single exposure). The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Specific Target Organ Toxicity - Repeated Exposure: The material is not considered a target organ toxicant (repeated exposure). The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

**Aspiration Hazard:** The material is not considered an aspiration hazard.

# ADDITIONAL TOXICOLOGY INFORMATION:

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

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carcinogen with unknown relevance to humans (A3).

# **SECTION 12 ECOLOGICAL INFORMATION**

#### **ECOTOXICITY**

This material is expected to be harmful to aquatic organisms and may cause long-term adverse effects in the aquatic environment.

The product has not been tested. The statement has been derived from the properties of the individual components.

#### **MOBILITY**

No data available.

## PERSISTENCE AND DEGRADABILITY

This material is not expected to be readily biodegradable. The product has not been tested. The statement has been derived from the properties of the individual components.

# POTENTIAL TO BIOACCUMULATE

Bioconcentration Factor: No data available.

Partition coefficient n-octanol/water (logarithmic value): No data available

## **SECTION 13 DISPOSAL CONSIDERATIONS**

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.

## 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 modespecific or quantity-specific shipping requirements.

DOT Shipping Description: NOT REGULATED AS HAZARDOUS MATERIAL 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: Not applicable

**REGULATORY LISTS SEARCHED:** 

01-1=IARC Group 1 05=MA RTK 06=NJ RTK 01-2A=IARC Group 2A

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 01-2B=IARC Group 2B
 07=PA RTK

 02=NTP Carcinogen
 08-1=TSCA 5(e)

 03=EPCRA 313
 08-2=TSCA 12(b)

04=CA Proposition 65

The following components of this material are found on the regulatory lists indicated.

Borate dispersion 06

# **CHEMICAL INVENTORIES:**

All components comply with the following chemical inventory requirements: AIIC (Australia), DSL (Canada), ENCS (Japan), IECSC (China), NZIoC (New Zealand), TCSI (Taiwan), TSCA (United States).

One or more components is listed on ELINCS (European Union). All other components are listed or exempted from listing on EINECS.

#### **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)

## **SECTION 16 OTHER INFORMATION**

NFPA RATINGS: Health: 2 Flammability: 1 Reactivity: 0

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

(0-Least, 1-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 American Coatings Association (ACA) (for HMIS ratings).

## **REVISION STATEMENT:**

SECTION 01 - Company SDS Address information was modified.

SECTION 03 - Composition information was modified.

SECTION 06 - Personal Precautions, Protective Equipment and Emergency Procedures information was modified.

SECTION 08 - Respiratory Protection information was modified.

SECTION 09 - Physical/Chemical Properties information was modified.

SECTION 15 - Regulatory Information information was added.

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#### 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	IMO/IMDG - International Maritime Dangerous Goods
Industrial Hygienists	Code
API - American Petroleum Institute	SDS - Safety Data Sheet
HMIS - Hazardous Materials Information System	NFPA - National Fire Protection Association (USA)
DOT - Department of Transportation (USA)	NTP - National Toxicology Program (USA)
IARC - International Agency for Research on	OSHA - Occupational Safety and Health Administration
Cancer	·

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NCEL - New Chemical Exposure Limit	EPA - Environmental Protection Agency
SCBA - Self-Contained Breathing Apparatus	PNOS - Particles Not Otherwise Specified

Prepared according to the 29 CFR 1910.1200 (2024) by Chevron.

The information in this SDS is based on the knowledge, information, and belief of Chevron and its affiliates as of the publication date. It is not a quality specification, and no warranty, express or implied, is given. We assume no responsibility or liability for the results of using this material. The information presented here pertains only to the listed product. Since conditions of use are beyond our control, it is the user's responsibility to determine the conditions for safe use of this product and assess its suitability for their application. Users should seek additional guidance if necessary.

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