# **Safety Data Sheet**



#### SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

## **Delo ELI Corrosion Inhibitor - Concentrate**

**Product Use:** Heavy Duty Coolant Product Number(s): 236541 **Company Identification** Chevron Canada Limited 500 - 5th Ave. SW Calgary, ALBERTA T2P 0L7

Canada

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: (800) LUBE TEK

## SECTION 2 HAZARDS IDENTIFICATION

#### **CLASSIFICATION:**

· Reproductive toxicant (developmental): Category 1B.



## Signal Word: Danger **Health Hazards:**

· May damage the unborn child (H360D).

#### PRECAUTIONARY STATEMENTS:

#### Prevention:

- Obtain special instructions before use (P201).
- Do not handle until all safety precautions have been read and understood (P202).
- Wear protective gloves/protective clothing/eye protection/face protection (P280).

#### Response:

IF exposed or concerned: Get medical advice/attention (P308+P313).

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### Storage:

Store locked up (P405).

#### Disposal:

• Dispose of contents/container in accordance with applicable local/regional/national/international regulations (P501).

#### SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
Potassium 2-ethylhexanoate	3164-85-0	10 - 30 %wt/wt
Molybdic acid, disodium salt, dihydrate	10102-40-6	1 - 5 %wt/wt
Tolyltriazole	29385-43-1	0.5 - 1.5 %wt/wt
Sodium Nitrite	7632-00-0	0.5 - 1.5 %wt/wt

Note that the actual concentration or concentration range of some or all of the above ingredients is considered confidential business information and is being withheld as permitted by WHMIS 2015.

## 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 eyes 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.

## 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.

## **DELAYED OR OTHER HEALTH EFFECTS:**

**Reproduction and Birth Defects:** Swallowing this material may cause harm to the unborn child based on animal data. See Section 11 for additional information. Risk depends on duration and level of exposure.

Indication of any immediate medical attention and special treatment needed Not Applicable

## **SECTION 5 FIRE FIGHTING MEASURES**

**EXTINGUISHING MEDIA:** Dry Chemical, CO2, Aqueous Film Forming Foam (AFFF) or alcohol resistant foam.

## PROTECTION OF FIRE FIGHTERS:

Fire Fighting Instructions: This material will burn although it is not easily ignited. See Section 7 for

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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: Potassium, Molybdenum, Sodium, Nitrogen.

## 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.

**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. Do not breathe vapor or fumes. Wash thoroughly after handling.

**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 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 general ventilation, local exhaust ventilation, or a combination of both.

#### PERSONAL PROTECTIVE EQUIPMENT

Eye/Face Protection: Wear protective equipment to prevent eye contact. Selection of protective

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Concentrate SDS: 38255 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.

Chemical Glove Material	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: No respiratory protection is normally required.

Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

## **Occupational Exposure Limits:**

Component	Country/ Agency	Form	TWA	STEL	Ceiling	Notation
Molybdic acid, disodium salt, dihydrate	ACGIH		0.5 mg/m3			A3
Molybdic acid, disodium salt, dihydrate	ACGIH	Inhalable fraction	10 mg/m3			
Molybdic acid, disodium salt, dihydrate	ACGIH	Respirable fraction	3 mg/m3			

NOTE ON OCCUPATIONAL EXPOSURE LIMITS: Consult local authorities for acceptable provincial values in Canada. Consult the Canadian Standards Association Standard Z94.4-2011 Selection, Use and Care of Respirators.

## **SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

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

Color: Red

Physical State: Liquid Odor: Faint or Mild

Odor Threshold: Not available

**pH:** 8.0 - 8.8; 5%volume @ 20°C (solution in water)

Vapor Pressure: Not available

Relative Vapor Density: Not available

**Initial Boiling Point:** 100°C (212°F) (Estimated)

**Solubility:** Completely Soluble **Freezing Point:** -5°C (23°F) (Typical)

Melting Point: Not available

Specific Gravity: 1.06 @ 15.6°C (60°F) (Minimum)

Particle Characteristics: Not applicable

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Concentrate SDS: 38255 **Density:** 1.08 kg/l @ 15°C (59°F) (Typical)

Kinematic Viscosity: Not available

Coefficient of Therm. Expansion / °F: Not available

**Evaporation Rate:** Not Applicable

**Decomposition temperature:** Not available

Partition coefficient n-octanol/water (logarithmic value): Not available

FLAMMABLE PROPERTIES:

Flammability (solid, gas): Not Applicable

Flashpoint: Not Applicable Autoignition: Not Applicable

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

Incompatibility With Other Materials: May form cancer-causing nitrosamines when mixed with

secondary amines.

Hazardous Decomposition Products: None known (None expected) **Hazardous Polymerization:** Hazardous polymerization will not occur.

Sensitivity to Mechanical Impact: No.

## SECTION 11 TOXICOLOGICAL INFORMATION

#### Information on toxicological effects

Serious Eve Damage/Irritation: The material is not considered an eve 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 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. For additional information on the acute toxicity of the components, call the technical information center. 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: This material may damage the unborn child. The product has not been tested.

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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:**

2-Ethylhexanoic acid (2-EXA) caused an increase in liver size and enzyme levels when repeatedly administered to rats via the diet. When administered to pregnant rats by gavage or in drinking water, 2-EXA caused teratogenicity (birth defects) and delayed postnatal development of the pups. Additionally, 2-EXA impaired female fertility in rats. Birth defects were seen in the offspring of mice who were administered sodium 2-ethylhexanoate via intraperitoneal injection during pregnancy.

Nitrite salts can cause methemoglobin to form in the blood, resulting in a fall in blood pressure, cyanosis, coma and possibly death. Infants are particularly susceptible to nitrite toxicity. Rats chronically exposed to sodium nitrite in drinking water had pathological changes in heart and lung tissue.

#### SECTION 12 ECOLOGICAL INFORMATION

#### **ECOTOXICITY**

This material is not expected to be harmful to aquatic organisms.

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 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. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by USEPA under RCRA (40CFR261), Environment Canada, or other State, Provincial, and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

#### 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-

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specific or quantity-specific shipping requirements.

**TC Shipping Description:** NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER TRANSPORT CANADA

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

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

#### SECTION 15 REGULATORY INFORMATION

#### **REGULATORY LISTS SEARCHED:**

01-1=IARC Group 1 01-2A=IARC Group 2A 01-2B=IARC Group 2B

The following components of this material are found on the regulatory lists indicated. Sodium Nitrite 01-2A

## **CHEMICAL INVENTORIES:**

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

One or more components does not comply with the following chemical inventory requirements: ENCS (Japan), KECI (Korea).

## **SECTION 16 OTHER INFORMATION**

REVISION STATEMENT: SECTION 05 - Fire Fighters Protection Measures information was modified.

SECTION 08 - Occupational Exposure Limit Table information was modified.

SECTION 08 - Skin Protection information was modified.

SECTION 09 - Physical/Chemical Properties information was modified.

SECTION 11 - Reproductive Toxicity 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	
WHMIS - Workplace Hazardous Materials	NFPA - National Fire Protection Association (USA)	
Information System		
DOT - Department of Transportation (USA)	NTP - National Toxicology Program (USA)	
IARC - International Agency for Research on	OSHA - Occupational Safety and Health Administration	
Cancer		
NCEL - New Chemical Exposure Limit	EPA - Environmental Protection Agency	

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SCBA - Self-Contained Breathing Apparatus

Prepared according to the WHMIS 2015 by Chevron Technical Center, 6001 Bollinger Canyon Road, San Ramon, CA 94583.

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

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