# Safety Data Sheet



# SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

## 1.1 Product identifier

# **Delo XLI Corrosion Inhibitor - Concentrate**

**Product Number(s):** 219900, 803149

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Identified Uses:** Corrosion Inhibitor for cooling systems

# 1.3 Details of the supplier of the safety data sheet

Chevron Products UK Limited 1 Westferry Circus Canary Wharf London E14 4HA United Kingdom

email: eumsds@chevron.com

#### 1.4 Emergency telephone number

# **Transportation Emergency Response**

Europe: 0044/(0)18 65 407333 and CHEMTREC: +1 703 527 3887

#### **Health Emergency**

Chevron Emergency Information Center: Located in the USA, international calls accepted 24 hours: +1 510 231

0623

Europe: 0044/(0)18 65 407333

**Product Information** 

Product Information: FAX number: 0044/20 77 19 5171

## SECTION 2 HAZARDS IDENTIFICATION

## 2.1 Classification of the substance or mixture

CLP CLASSIFICATION: Reproductive toxicant (developmental): Category 2, H361D.

#### 2.2 Label elements

Under the criteria of Regulation (EC) No 1272/2008 (CLP):



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Signal Word: Warning

#### **HAZARD STATEMENTS:**

**Health Hazards:** Suspected of damaging the unborn child (H361D).

- contains: Sodium 2-ethylhexanoate

## PRECAUTIONARY STATEMENTS:

**Prevention:** Obtain special instructions before use (P201). Wear protective gloves/protective clothing/eye protection/face protection (P280).

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

**Storage:** Store locked up (P405).

**Disposal:** Dispose of contents/container in accordance with applicable local/regional/national/international

regulations (P501).

#### 2.3 Other hazards

This product is not, or does not contain, a substance that is a potential PBT or a vPvB.

#### SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2 Mixtures

This material is a mixture.

COMPONENTS	CAS	EC	REGISTRATION	CLP	AMOUNT
	NUMBER	NUMBER	NUMBER	CLASSIFICATION	
Sodium 2-ethylhexanoate	19766-89-3	243-283-8	Exempt	Repr. 2/H361D	10 -
					30 %weigh
					t
Methyl-1H-benzotriazole	29385-43-1	249-596-6	01-2119979081-35	Aquatic Chronic	0.5 - <
				2/H411; Acute Tox.	1.5 %weig
				4/H302	ht
Imidazole	288-32-4	206-019-2	01-2119485825-24	Eye Dam. 1/H318;	0.1 - <
				Acute Tox. 4/H302;	0.3 %weig
				Repr. 1B/H360; Skin	ht
				Corr. 1C/H314	

The full text of all CLP H-statements is shown in Section 16.

## SECTION 4 FIRST AID MEASURES

#### 4.1 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.

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**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.

# 4.2 Most important symptoms and effects, both acute and delayed IMMEDIATE SYMPTOMS AND HEALTH EFFECTS

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

**Skin:** Contact with the skin is not expected to be harmful. **Ingestion:** Not expected to be harmful if swallowed. **Inhalation:** Not expected to be harmful if inhaled.

#### DELAYED OR OTHER SYMPTOMS AND HEALTH EFFECTS: Not classified.

See Section 11 for additional information. Risk depends on duration and level of exposure.

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

Not applicable.

#### SECTION 5 FIRE FIGHTING MEASURES

#### 5.1 Extinguishing media

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

#### 5.2 Special hazards arising from the substance or mixture

**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: Sodium .

## 5.3 Advice for firefighters

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.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

# 6.1 Personal precautions, protective equipment and emergency procedures

Eliminate all sources of ignition in vicinity of spilled material. Refer to Sections 5 and 8 for more information.

## **6.2 Environmental precautions**

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.

## 6.3 Methods and material for containment and cleaning up

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 and dispose of in a manner consistent with applicable requirements. Place other contaminated materials in disposable containers and dispose of in a manner consistent with applicable requirements. Report spills to local authorities as appropriate or required.

# 6.4 Reference to other sections

See sections 8 and 13.

## SECTION 7 HANDLING AND STORAGE

# 7.1 Precautions for safe handling

General Handling Information: Avoid contaminating soil or releasing this material into sewage and drainage

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systems and bodies of water.

**Precautionary Measures:** Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Wash thoroughly after handling. Keep out of the reach of children.

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.

## 7.2 Conditions for safe storage, including any incompatibilities

Not Applicable

**7.3 Specific end use(s):**Corrosion Inhibitor for cooling systems

#### 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 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 protection is usually provided for a limited time or under certain circumstances. Refer to appropriate CEN standards.

# 8.1 Control parameters

**Occupational Exposure Limits:** No applicable occupational exposure limits exist for this material or its components. Consult local authorities for appropriate values.

# 8.2 Exposure controls

#### **ENGINEERING CONTROLS:**

Use in a well-ventilated area.

#### PERSONAL PROTECTIVE EQUIPMENT

**Eye/Face Protection:** No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

**Skin Protection:** No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Suggested materials for protective gloves include: Natural rubber, Neoprene, Nitrile Rubber, Polyvinyl Chloride (PVC or Vinyl).

**Respiratory Protection:** No respiratory protection is normally required.

#### **ENVIRONMENTAL EXPOSURE CONTROLS:**

See relevant Community environmental protection legislation or the Annex, as applicable.

# SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

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

#### 9.1 Information on basic physical and chemical properties

**Appearance** 

Color: Green

**Physical State:** Liquid **Odor:** Faint or Mild

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**Odor Threshold:** No data available

**pH:** 7.80 - 8.50

**Melting Point:** Not Applicable

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

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

Flashpoint: Not Applicable

Evaporation Rate: No data available Flammability (solid, gas): No Data Available

Flammability (Explosive) Limits (% by volume in air):

Lower: No data available Upper: No data available

**Vapor Pressure:** No data available

**Solubility:** Soluble in water.

Partition coefficient: n-octanol/water: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available

Viscosity: No data available

**Explosive Properties:** No Data Available **Oxidising properties:** No Data Available

9.2 Other Information: No Data Available

#### SECTION 10 STABILITY AND REACTIVITY

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

**10.2 Chemical Stability:** This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions: Hazardous polymerization will not occur.

10.4 Conditions to Avoid: Not applicable

**10.5 Incompatible materials to avoid:** Not applicable

10.6 Hazardous decomposition products: None known (None expected)

#### SECTION 11 TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects

Serious Eye Damage/Irritation: The eye irritation hazard is based on evaluation of data for similar materials.

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 similar materials.

Acute Toxicity Estimate (dermal): Not Applicable

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

Acute Toxicity Estimate (oral): 50696 mg/kg

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

Acute Toxicity Estimate (inhalation): Not Applicable

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

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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 components or a similar material.

Aspiration Toxicity: No data available

#### 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.

#### **SECTION 12 ECOLOGICAL INFORMATION**

#### 12.1 Toxicity

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.

#### 12.2 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.

#### 12.3 Bioaccumulative potential

Bioconcentration Factor: No Data Available

Octanol/Water Partition Coefficient: No data available

### 12.4 Mobility in soil

No data available.

#### 12.5 Results of PBT and vPvB assessment

This product is not, or does not contain, a substance that is a potential PBT or a vPvB.

#### 12.6 Other adverse effects

No other adverse effects identified.

## SECTION 13 DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

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 international, country, or local laws and regulations. In accordance with European Waste Catalogue (E.W.C.) the codification is the following: 16 01 14

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#### SECTION 14 TRANSPORT INFORMATION

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

#### ADR/RID

#### NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT

- **14.1 UN number:** Not applicable
- **14.2 UN proper shipping name:** Not applicable **14.3 Transport hazard class(es):** Not applicable
- 14.4 Packing group: Not applicable
- 14.5 Environmental hazards: Not applicable
- 14.6 Special precautions for user: Not applicable

#### **ICAO**

# NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT

- **14.1 UN number:** Not applicable
- **14.2 UN proper shipping name:** Not applicable **14.3 Transport hazard class(es):** Not applicable
- 14.4 Packing group: Not applicable
- 14.5 Environmental hazards: Not applicable
- 14.6 Special precautions for user: Not applicable

#### IMO

### NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT

- 14.1 UN number: Not applicable
- **14.2 UN proper shipping name:** Not applicable **14.3 Transport hazard class(es):** Not applicable
- 14.4 Packing group: Not applicable
- 14.5 Environmental hazards: Not applicable
- 14.6 Special precautions for user: Not applicable
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: Not applicable

#### SECTION 15 REGULATORY INFORMATION

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture REGULATORY LISTS SEARCHED:

- 01=EU Directive 76/769/EEC: Restrictions on the marketing and use of certain dangerous substances.
- 02=EU Directive 90/394/EEC: Carcinogens at work.
- 03=EU Directive 92/85/EEC: Pregnant or breastfeeding workers.
- 04=EU Directive 96/82/EC (Seveso II): Article 9.
- 05=EU Directive 96/82/EC (Seveso II): Articles 6 and 7.
- 06=EU Directive 98/24/EC: Chemical agents at work.
- 07=EU Directive 2004/37/EC: On the protection of workers.
- 08=EU Regulation EC No. 689/2008: Annex 1, Part 1.
- 09=EU Regulation EC No. 689/2008: Annex 1, Part 2.
- 10=EU Regulation EC No. 689/2008: Annex 1, Part 3.
- 11=EU Regulation EC No. 850/2004: Prohibiting and restricting persistent organic pollutants (POPs).
- 12=EU REACH, Annex XVII: Restrictions on manufacture, placing on the market and use of certain dangerous substances, mixture & article.
- 13=EU REACH, Annex XIV: Candidate List of Substances of Very High Concern for Authorization (SVHC).

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The following components of this material are found on the regulatory lists indicated. Imidazole 03, 04, 05, 06

#### **CHEMICAL INVENTORIES:**

All components comply with the following chemical inventory requirements: AICS (Australia), DSL (Canada), EINECS (European Union), ENCS (Japan), IECSC (China), KECI (Korea), PICCS (Philippines), TSCA (United States).

#### 15.2 Chemical safety assessment

No chemical safety assessment.

#### **SECTION 16 OTHER INFORMATION**

**REVISION STATEMENT:** SECTION 02 - Precautionary Statements information was added.

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#### **Full text of CLP H-statements:**

H411; Toxic to aquatic life with long lasting effects

H318; Causes serious eye damage

H302; Harmful if swallowed

H360; May damage fertility or the unborn child H361d; Suspected of damaging the unborn child H314; Causes severe skin burns and eye damage

#### 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
CVX - Chevron	CAS -	Chemical Abstract Service Number
NQ - Not Quantifiable		

Prepared according to the EU Regulation 1907/2006 (as amended) by Chevron Energy Technology Company, 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.

No Annex

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