Safety Data Sheet

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

1.1 Product identifier

Cetus DE 100

Product Number(s): 219400, 802079

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified Uses: Compressor Oil

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:

- Chronic aquatic toxicant: Category 1, H410; Very toxic to aquatic life with long lasting effects.

2.2 Label elements
Under the criteria of GB CLP:

Signal Word: Warning

HAZARD STATEMENTS:

Environmental Hazards:
- Very toxic to aquatic life with long lasting effects (H410).

PRECAUTIONARY STATEMENTS:
Prevention:
- Obtain special instructions before use (P201).
- Do not handle until all safety precautions have been read and understood (P202).
- Avoid release to the environment (P273).

Response:
- Collect spillage (P391).

Disposal:
- Dispose of contents and container in accordance with applicable local, regional, national, and international regulations (P501).

2.3 Other hazards
This material does not contain a substance considered to have endocrine disrupting properties at levels of 0.1% weight or higher.

SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS

3.2 Mixtures
This material is a mixture.

COMPONENTS	CAS NUMBER	EC NUMBER	REGISTRATION NUMBER	GB CLP CLASSIFICATION	AMOUNT
Phosphorothioic acid, O,O,O-triphenyl ester	597-82-0	209-909-9	**	Aquatic Chronic 1/H410 [M=10]; PBT/EUH440	1 - 5 %weight

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

In accordance with reference IP 346/92: "DMSO Extraction Method", we have determined that the base oils used in this preparation contain <3% DMSO extract and are not carcinogenic.
**Not available or substance is not currently required for registration under UK REACH.

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.
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: High-Pressure Equipment Information: Accidental high-velocity injection under the skin of materials of this type may result in serious injury. Seek medical attention at once should an accident like this occur. The initial wound at the injection site may not appear to be serious at first; but, if left untreated, could result in disfigurement or amputation of the affected part.
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. Contains a synthetic hydrocarbon 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.

DELAYED OR OTHER SYMPTOMS AND HEALTH EFFECTS: Not classified.

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: Phosphorus, Sulfur .

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
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 in the Exposure Controls/PersonalProtection section. 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 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.
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.

7.2 Conditions for safe storage, including any incompatibilities
Not Applicable

7.3 Specific end use(s): Compressor Oil

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.

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: 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.

Chemical Glove Material	Thickness (mm)	Typical Breakthrough Time (minutes)
Butyl	0.7	120
Nitrile	0.8	240
Viton Butyl	0.3	240

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.

Positive pressure air-supplying respirator -
If airborne concentration limits exceed the maximum use concentration offered from an air purifying respirator.

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

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: Brown to yellow
Physical State: Viscous liquid
Odor: Hydrocarbon odor
Odor Threshold: No data available
pH: Not Applicable
Melting Point: No data available
Freezing Point: Not Applicable
Initial Boiling Point: No data available
Flashpoint: (Cleveland Open Cup) 232 °C (450 °F) (Minimum)
Evaporation Rate: No data available
Flammability (solid, gas): Not Applicable
Flammability (Explosive) Limits (% by volume in air):
Lower: Not Applicable Upper: Not Applicable
Vapor Pressure: No data available
Relative Vapor Density: No data available
Density: 0.962 g/cm3 @ 15°C (59°F) (Typical)

Solubility: Insoluble in water.
Partition coefficient n-octanol/water (logarithmic value): No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Kinematic Viscosity: 90 mm2/s @ 40°C (104°F) (Minimum)
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 hazard classes
Product Information:
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 Toxicity Estimate (dermal): Not Applicable

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 Toxicity Estimate (oral): Not Applicable

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 (inhalation): Not Applicable

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.

Component Information:

Serious Eye Damage/Irritation:	
Phosphorothioic acid, O,O,O-triphenyl ester	Based on available data, the classification criteria are not met

Skin Corrosion/Irritation:	
Phosphorothioic acid, O,O,O-triphenyl ester	Based on available data, the classification criteria are not met

Skin Sensitization:	
Phosphorothioic acid, O,O,O-triphenyl ester	Based on available data, the classification criteria are not met

Acute Dermal Toxicity:	
Phosphorothioic acid, O,O,O-triphenyl ester	Based on available data, the classification criteria are not met

Acute Oral Toxicity:	
Phosphorothioic acid, O,O,O-triphenyl ester	Based on available data, the classification criteria are not met

Acute Inhalation Toxicity:	
Phosphorothioic acid, O,O,O-triphenyl ester	Based on available data, the classification criteria are not met

Germ Cell Mutagenicity:	
Phosphorothioic acid, O,O,O-triphenyl ester	Based on available data, the classification criteria are not met

Carcinogenicity:	
Phosphorothioic acid, O,O,O-triphenyl ester	Based on available data, the classification criteria are not met

Reproductive Toxicity:	
Phosphorothioic acid, O,O,O-triphenyl ester	Based on available data, the classification criteria are not met

Specific Target Organ Toxicity - Single Exposure:	
Phosphorothioic acid, O,O,O-triphenyl ester	Based on available data, the classification criteria are not met

Specific Target Organ Toxicity - Repeated Exposure:	
Phosphorothioic acid, O,O,O-triphenyl ester	Based on available data, the classification criteria are not met

11.2 Information on other hazards
No other hazards identified.

SECTION 12 ECOLOGICAL INFORMATION

Product Information:
12.1 Toxicity
This material is expected to be very toxic 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.

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

12.4 Mobility in soil
No data available.

12.5 Results of PBT and vPvB assessment
This material contains a substance that is assessed to be a PBT, but not a vPvB. Contains - Phosphorothioic acid, O,O,O-triphenyl ester

12.6 Endocrine Disrupting Properties
This mixture does not contain any substances that are assessed as having endocrine disrupting properties.

12.7 Other adverse effects
No other adverse effects identified.

Component Information:

Acute Toxicity:	
Phosphorothioic acid, O,O,O-triphenyl ester	Test Qualifier: EC50 Test Result: 100 mg/l Species: Invertebrate Duration:48
Phosphorothioic acid, O,O,O-triphenyl ester	Test Qualifier: LC50 Test Result: 100 mg/l Species: Fish Duration:96 hour(s)
Phosphorothioic acid, O,O,O-triphenyl ester	Protocol: OECD 201-Alga Growth Inhib Test Qualifier: EC50 Test Result: 100 mg/l Species: Algae Duration:72 hour(s)

Long-term Toxicity:	
Phosphorothioic acid, O,O,O-triphenyl ester	Test Qualifier: NOEC Test Result: <=1 ug/l Species: Fish Duration:97 day(s)

Biodegradation:

Phosphorothioic acid, O,O,O-triphenyl ester	Test Result: Not readily biodegradable

Bioaccumulative Potential:	
Phosphorothioic acid, O,O,O-triphenyl ester	No test data available

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
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.
In accordance with European Waste Catalogue (E.W.C.) the codification is the following:13 02 06

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

14.1 UN Number or ID Number: UN3082
14.2 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PHOSPHOROTHIOIC ACID O,O,O-TRIPHENYL ESTER)
14.3 Transport hazard class(es): 9
14.4 Packing group: III
14.5 Environmental hazards: Yes
14.6 Special precautions for user: Road Tunnel Restriction Code: (-); Hazard ID No: 90;
M6

ADN

14.1 UN Number or ID Number: UN3082
14.2 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PHOSPHOROTHIOIC ACID O,O,O-TRIPHENYL ESTER)
14.3 Transport hazard class(es): 9
14.4 Packing group: III
14.5 Environmental hazards: Yes
14.6 Special precautions for user: Not applicable

ICAO / IATA

14.1 UN Number or ID Number: UN3082
14.2 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PHOSPHOROTHIOIC ACID O,O,O-TRIPHENYL ESTER)
14.3 Transport hazard class(es): 9
14.4 Packing group: III
14.5 Environmental hazards: Yes
14.6 Special precautions for user: Not applicable

IMO / IMDG

14.1 UN Number or ID Number: UN3082
14.2 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PHOSPHOROTHIOIC ACID O,O,O-TRIPHENYL ESTER)
14.3 Transport hazard class(es): 9
14.4 Packing group: III
14.5 Environmental hazards: MARINE POLLUTANT(PHOSPHOROTHIOIC ACID O,O,O-TRIPHENYL ESTER)
14.6 Special precautions for user: Not applicable
14.7 Maritime Transport in Bulk according to IMO Instruments: 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 92/85/EEC: Pregnant or breastfeeding workers.
02=EU Directive 2012/18/EU: Seveso III.
03=EU Directive 98/24/EC: Chemical agents at work.
04=EU Directive 2004/37/EC: On the protection of workers.
05=EU Regulation EC No. 689/2008: Annex 1, Part 1.
06=EU Regulation EC No. 850/2004: Prohibiting and restricting persistent organic pollutants (POPs).
07=EU REACH, Annex XVII: Restrictions on manufacture, placing on the market and use of certain dangerous substances, mixture & article.
08=EU REACH, Annex XIV: Authorization List or Candidate List of Substances of Very High Concern for Authorization (SVHC).

The following components of this material are found on the regulatory lists indicated.
Phosphorothioic acid, O,O,O-triphenyl ester 08

CHEMICAL INVENTORIES:
All components comply with the following chemical inventory requirements: AIIC (Australia), DSL (Canada), ENCS (Japan), IECSC (China), KECI (Korea), PICCS (Philippines), TCSI (Taiwan), TSCA (United States).

15.2 Chemical safety assessment
No chemical safety assessment.

SECTION 16 OTHER INFORMATION

REVISION STATEMENT: SECTION 02 - Environmental Classification information was added.
SECTION 02 - Hazard Statements information was added.
SECTION 02 - Pictogram information was added.
SECTION 02 - Precautionary Statements information was added.
SECTION 02 - Signal Word information was added.
SECTION 02 - Supplemental Hazard information was modified.
SECTION 03 - Composition information was added.
SECTION 03 - Composition information was deleted.
SECTION 03 - Ingredient Comment information was deleted.
SECTION 05 - Fire Fighters Protection Measures information was modified.
SECTION 06 - Personal Precautions, Protective Equipment and Emergency Procedures information was modified.
SECTION 08 - Respiratory Protection information was added.
SECTION 08 - Respiratory Protection information was modified.
SECTION 08 - Skin Protection information was modified.
SECTION 09 - Physical/Chemical Properties information was modified.
SECTION 11 - Toxicological Information information was modified.
SECTION 12 - Ecological Information information was added.
SECTION 12 - Ecological Information information was deleted.

SECTION 12 - Ecological Information information was modified.
SECTION 12.6 - Endocrine Disrupting Properties information was modified.
SECTION 14 - ADN Classification information was added.
SECTION 14 - ADR Classification information was added.
SECTION 14 - ADR Classification information was deleted.
SECTION 14 - ADR Classification information was modified.
SECTION 14 - ICAO Classification information was added.
SECTION 14 - ICAO Classification information was deleted.
SECTION 14 - ICAO Classification information was modified.
SECTION 14 - IMO Classification information was added.
SECTION 14 - IMO Classification information was deleted.
SECTION 14 - IMO Classification information was modified.
SECTION 15 - Regulatory Information information was added.
SECTION 15 - Regulatory Information information was modified.
SECTION 16 - Full Text of H-Statements information was modified.

Revision Date: October 01, 2025

Full text of CLP H-statements:
Aquatic Chronic 1/H410; Very toxic to aquatic life with long lasting effects
Persistent, Bioaccumulative & Toxic (PBT), EUH440; Accumulates in the environment and living organisms including in humans.

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 UK REACH 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.

No Annex