

HDEO^{EP}



1. Identification

Product Identifier

HDEO^{EP}

Other means of identification

None

Recommended use of the chemical and restrictions on use

Use as a hydraulic fluid, sea water displacement fluid, storage fluid, lubricant, corrosion prevention, laboratory use. For use in offshore or onshore oil and gas industry and industrial use.

Details of manufacturer or importer

Able Westchem
273 Collier Road
Bayswater, Perth
Western Australia 6053
enquiries@westchem.com.au
Telephone (08) 9471 9111

UK Supplier

Offshore Environmental Oils Ltd,
PO Box 180
Leigh, Lancashire
WN7 9DW,
United Kingdom
Email info@offshore-oils.com
Telephone +44 8452 967751

Emergency telephone number

Poisons Information Centre 13 11 26 (24 hours)

2. Hazard Identification

Classification of the hazardous chemical

This product is not classified as dangerous according to Work Health and Safety (WHS) regulations 2025.

Label elements, including precautionary statements.

Hazard Pictograms	None
Signal Word	None
Hazard Statements	None
Precautionary Statements	None
Supplemental Hazard Information	None

Supplemental Packaging Requirements.

Containers to be fitted with child resistant fastenings.	Not applicable.
Tactile Warning of danger	Not applicable.
Supplemental Hazard Information	None

Other hazards which do not result in classification

Physical-Chemical Properties

Contaminated surfaces may be extremely slippery.

High Pressure Applications

Injections through the skin as a result of contact with the product at high pressures constitute a major medical emergency. See notes to physician in section 4 of this safety data sheet.

3. Composition and Information On Ingredients

Product does not contain hazardous substances nor substances with Workplace Exposure Limits in concentrations above regulatory thresholds.

For the full text of the H-Statements in this section, see section 16.

4. First Aid Measures

Description of necessary first aid measures

General Advice

Seek medical advice if irritation or symptoms persist and show this safety data sheet.

Skin contact

Wash off immediately with plenty of soap and water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist.

Eye contact

Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention if irritation or symptoms persist.

Inhalation

Move the exposed person to fresh air. Get medical attention if symptoms occur.

Ingestion

DO NOT INDUCE VOMITING. Never give anything to an unconscious person. If swallowed, seek medical advice immediately and show this container or label.

Protection of First Aiders.

No action should be taken without suitable training or which involves any personal risk.

Symptoms caused by exposure

The following adverse effects may occur with use of this product: Irritant effects.

Medical Attention and Special Treatment

If swallowed, seek medical advice immediately and show this container or label.

High Pressure Applications

Injections through the skin due to contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious immediately, but within a few hours tissue can become discoloured, swollen, and painful with extensive subcutaneous necrosis. Surgical exploration should be undertaken without delay. Extensive and thorough debridement of the wound and underlying tissue is necessary to minimise tissue loss and to limit or prevent permanent damage. It should be noted that high pressure may force the product a considerable distance along tissue planes.

5. Fire Fighting Measures

Suitable extinguishing equipment

Use extinguishing media appropriate to the surrounding fire conditions: Carbon Dioxide (CO₂), dry chemical, foam, water fog.

Unsuitable extinguishing equipment

Do not use solid water stream as it may scatter and spread fire.

Special hazards arising from the chemical

Hazardous Combustion Products

Burning produces irritating, toxic and obnoxious fumes including carbon and sulphur oxides.

Special protective equipment and precautions for fire fighters

Fire fighters should wear appropriate protective equipment and self-contained breathing



apparatus (SCBA) with a full face piece operating in positive pressure mode and full turnout gear. Use water spray to cool unopened containers.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

For Non-Emergency Personnel

Contact emergency personnel. No action should be taken without suitable training or involving personal risk. Evacuate surrounding areas and keep unnecessary and unprotected personnel from entering. Ensure adequate ventilation of the working area. Wear suitable protective equipment. Contaminated surfaces will be extremely slippery. Remove all sources of ignition. Do not breathe vapour or mist. Do not touch or walk through spilt material.

For Emergency Responders

Wear a suitable chemical protective suit, gloves and chemical boots. See also information in "For non-emergency personnel".

Environmental precautions

Avoid dispersal of spilt and runoff and contact with soil, drains, sewers or waterways. Prevent further spillage if safe. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil).

Methods and material for containment and cleaning up

Small Spill

Stop leak if possible without risk. Move containers from the spill area. Absorb with inert, absorbent material, transfer to suitable, labelled containers for disposal. Dispose of via a licensed water disposal contractor.

Large Spill

Contact emergency personnel immediately. Stop leak if possible without risk. Move containers from the spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements and confined areas. Collect and contain spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and transfer to suitable, labelled containers for disposal. Dispose of via a licensed water disposal contractor.

Reference to other sections

For personal protective equipment refer to Section 8. For disposal refer to Section 13.

7. Handling And Storage

Precautions for safe handling

Advice for safe handling

Wear suitable personal protective equipment. Avoid contact with eyes and skin and clothing. Avoid breathing vapours or spray mist. Keep in the original container or an approved alternative made from a compatible material and keep tightly closed when not in use. Do not reuse containers.

Advice on General Occupational Hygiene

Smoking, eating and drinking should be prohibited in areas where this material is handled, stored or processed. Wash thoroughly after use. Contaminated clothing and personal protective equipment should be removed before entering eating areas. Ensure that eyewash stations and chemical safety showers are close to the working location.

Conditions for safe storage, including any incompatibilities

Store in correctly labelled containers. Store in a cool, dry, well-ventilated area away from heat and direct sunlight. Keep containers tightly closed until ready for use. Where possible, design the

HDEO^{EP}

installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical contacts. Protect from moisture and frost. Store in accordance with local regulations, away from incompatible materials (see section 10).

Specific end uses

Refer to section 1 and exposure scenarios in annex if applicable.

8. Exposure Controls / Personal Protection**Exposure control measures – exposure standards, biological monitoring**

None of the components currently have workplace exposure limits listed in the Safe Work Australia, Workplace Exposure Standards For Airborne Contaminants, 1st October 2022, OSHA Permissible Exposure Limits (PEL), American Conference of Government Industrial Hygienists (ACGIH) Threshold Limit Values (TLV), UK EH40 Workplace Exposure Limits or European Indicative Exposure Limit Values.

None of the components currently have biological exposure limits.

Derived No effect Level

No DELs available.

Predicated No effect Concentration

No PNECs available.

Appropriate Engineering Controls

General ventilation is normally adequate. An Exposure Control Approach (ECA) is established for operations involving this product based upon the OEL / Occupational Hazard Category and the outcome of a site- or operation specific risk assessment.

Individual protection measures, for example personal protective equipment (PPE)**Eye and Face Protection**

Safety glasses with side shields are considered minimum protection. Refer to standards AS/NZS 1336 and AS/NZS 1337.

Skin Protection**Hand protection**

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Ensure that the break through time of the glove is not exceeded. Check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended. Refer to the glove supplier for information on breakthrough time for specific gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands after use. This information does not replace suitability tests since glove protection varies depending on the conditions under which the product is used. Refer to the standard AS/NZS 2161.1

Gloves			
Duration of Contact	Glove Material	Glove Thickness	Breakthrough time
Short term	Nitrile Rubber (NBR)	>0.11 mm	8 hours
Long term (repeated)	Nitrile Rubber (NBR)	>0.11 mm	8 hours

Body Protection

Use of protective clothing is good industrial practice. Personal protective equipment for the body should be selected based on the task being performed. Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that does not soak through to the

HDEO^{EP}

skin. Overalls should be washed regularly. When the risk of exposure is high (e.g. if cleaning spillages or when at risk of splashing), chemical resistant aprons and or imperious chemical suits and boots will be required.

Respiratory protection

Not normally required where there is adequate ventilation to control exposure. In case of insufficient ventilation, or if engineering controls and work practices cannot keep exposure limits below occupational exposure limits or if exposure is unknown select and use respirators in accordance with AS/NZS 1715/1716. When mists or vapours exceed the exposure standards then the use of the following is recommended: Approved respirator for organic vapour with a dust / mist filter (A2P2/P3). Filter capacity and respirator type depends on exposure level. Selection of, and instruction on using all personal protective equipment should be performed by an industrial hygienist or other qualified personnel.

Environmental Exposure Controls

Emission from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels below their respective threshold limit value.

Thermal hazards.

May cause thermal burns. Combustion produces irritating, toxic and obnoxious fumes including carbon oxides.

9. Physical And Chemical Properties**Information on basic physical and chemical properties**

Appearance	Pale yellow / yellow liquid
Odour	Bland
Odour Threshold	No data available
pH	Not applicable
Melting point / freezing point	< -30 °C
Boiling point and boiling range	>200 °C
Flash Point	>200 °C
Evaporation rate	No data available
Flammability	No data available
Upper / Lower flammability or explosion limits	No data available
Vapour Pressure	<1 mmHg at 20 °C
Vapour density	Not available
Relative density	1.065 gcm ⁻³ @ 20 °C
Solubility	Insoluble
Partition coefficient n-octanol / water	Not applicable
Auto ignition temperature	No data available
Decomposition temperature	>220 °C
Viscosity	Typically 183 mm ² /s @40 °C
Specific Heat Value	No data available
Saturated Vapour concentration	No data available
Release of invisible flammable vapours or gases	No data available
Particle size	Not applicable

HDEO^{EP}

Size distribution	Not applicable
Shape and aspect ratio	Not applicable
Crystallinity	Not applicable
Dustiness	Not applicable
Surface area	Not applicable
Degree of aggregation or agglomeration, and dispersibility	Not applicable
Redox potential	Not applicable
Biodurability or biopersistence	Not applicable
Surface coating or chemistry	Not applicable

10. Stability And Reactivity**Reactivity**

No data available.

Chemical Stability

Stable under normal operating conditions.

Possibility of hazardous reactions

None expected under normal operating conditions

Conditions to avoid

No specific data.

Incompatible materials

None expected under normal operating conditions.

Hazardous decomposition products

Stable under normal conditions. Decomposition products may include carbon and sulphur oxides.

11. Toxicological Information**Information on toxicological effects****Information on routes of exposure**

Routes of anticipated entry: Inhalation, Dermal.

Product Information**Potential Acute Health Effects**

Inhalation	No known significant effects or critical hazards.
Ingestion	No known significant effects or critical hazards.
Skin Contact	No known significant effects or critical hazards.
Eye Contact	No known significant effects or critical hazards.

Early onset symptoms related to exposure

Inhalation	No known significant effects or critical hazards.
Ingestion	No known significant effects or critical hazards.
Skin Contact	No known significant effects or critical hazards.
Eye Contact	No known significant effects or critical hazards.

Delayed health effects from exposure

Inhalation	No known significant effects or critical hazards.
Ingestion	No known significant effects or critical hazards.
Skin Contact	No known significant effects or critical hazards.
Eye Contact	No known significant effects or critical hazards.

HDEO^{EP}**Numerical measures of toxicity**

No data available. Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

Exposure levels

No data available

Interactive effects

None expected

Data limitations.

No data available

Potential Chronic Health Effects**General**

No known significant effects or critical hazards.

Carcinogenicity

No known significant effects or critical hazards.

Mutagenicity

No known significant effects or critical hazards.

Developmental effects

No known significant effects or critical hazards.

Fertility effects

No known significant effects or critical hazards.

Acute Toxicity

No known significant effects or critical hazards.

Skin Corrosion / Irritation

No known significant effects or critical hazards.

Serious Eye-Damage / Irritation

No known significant effects or critical hazards.

Respiratory or skin sensitisation

No known significant effects or critical hazards.

Germ Cell Mutagenicity

No known significant effects or critical hazards.

Carcinogenicity

No known significant effects or critical hazards.

Reproductive Toxicity

No known significant effects or critical hazards.

Target Organ effects (STOT) –

No known significant effects or critical hazards.

Single Exposure**Target Organ effects (STOT) –**

No known significant effects or critical hazards.

Repeated Exposure**Aspiration Hazard**

No known significant effects or critical hazards.

Carcinogenic effects

No component of this product at levels greater than or equal to 0.1% is identified as a carcinogen by ACGIH, the International Agency for Research on Cancer (IARC), the European Commission (EC), or the National Occupational Health and Safety Commission (Australia).

12. Ecological Information**Ecotoxicity**

Not classified as environmentally hazardous in accordance with the 'Approved Criteria for Classifying Hazardous Substances' [NOHSC (1008)/2004 as amended and adapted].

Persistence and degradability

Product is expected to biodegrade.

Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

Mobility in soil

Soil / Water partition coefficient (K_{oc}) Not Available.

Mobility Not Available.

Other adverse effects

No known significant effects or critical hazards.



13. Disposal Considerations

Disposal Methods

Disposal considerations

Safe handling and disposal methods

Dispose of through a licensed disposal company in accordance with the local regulations. Where possible recycling is preferred to disposal or incineration. using a licensed disposal company.

Disposal of any contaminated packaging:

Empty containers completely. Retain label(s) on container. Dispose of through a licensed disposal company in accordance with local regulations on waste and hazardous waste. Where possible recycling is preferred to disposal or incineration.

Waste Treatment – relevant information.

Product sinks in water.

Sewage Treatment – relevant information.

Waste should not be disposed of by release to sewers. Product sinks in water.

Environmental regulations.

None.

14. Transport Information

UN Number	Not regulated under ADR/RID, ADN, IMDG or IATA.
Proper Shipping Name or technical name	Not regulated under ADR/RID, ADN, IMDG or IATA.
Transport hazard class(es)	Not regulated under ADR/RID, ADN, IMDG or IATA.
Packing group number	Not regulated under ADR/RID, ADN, IMDG or IATA.
Environmental hazards for Transport purposes	Not regulated as a dangerous good.
Special Precautions for user	Not applicable.
Additional information	Not regulated under ADR/RID, ADN, IMDG or IATA.
Hazchem or emergency action code	Not regulated.

15. Regulatory Information

Safety, health and environmental regulations

Australian Inventory (AICS)

All components are listed or exempted.

EU regulation (EC) No. 1907/2006 (REACH).

Annex XVII – Restrictions on the manufacture, placing of the market and use of certain dangerous substances, mixtures and articles

Not applicable.

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).

Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer

Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast)

Not applicable

REACH - List of substances subject to authorisation (Annex XIV)

Not applicable

Poisons Schedule Number

Not applicable

HDEO^{EP}**Chemical Safety assessment**

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier as this product contains substances for which Chemical Safety Assessments are still required.

16. Any other relevant information

Date of preparation or review 25th February 2026.

Author D. Gleeson

Changes from previous version Updated Sections 1, 2, 4 & 8

Key abbreviations or Acronyms used.

ADN	European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway.
ADR	The European Agreement concerning the International Carriage of Dangerous Goods by Road.
AICS	Australian Inventory of Chemical Substances.
ATE	Acute Toxicity Estimate.
BCF	Bioconcentration Factor.
CAS	Chemicals Abstract Service.
CSA	Chemical Safety Assessment.
CSR	Chemical Safety Report.
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008].
DMEL	Derived Minimal effect Level
DNEL	Derived No effect Level.
EC	European Commission.
EINECS	European Inventory of Existing Commercial chemical Substances.
ENCS	Existing and New Chemical Substances.
ES	Exposure Scenario.
EU	European Union.
EU H Statement	CLP Specific Hazard Statement.
EWG	European Waste Catalogue.
GHS	Globally Harmonised System of Classification and Labelling of Chemicals.
IATA	International Air Transport Association.
IBC	Intermediate Bulk Container.
IESCS	Inventory of Existing Chemical Substances Produced or Imported in China.
IMDG	International Maritime Dangerous Goods.
KECI	Korea Existing Chemicals Inventory.
Koc	Soil Organic Carbon-Water Partitioning Coefficient.
MARPOL	Marine Pollution.
MARPOL 73/78	International Convention for the Prevention of Pollution From Ships 1973 as modified by the protocol of 1978.
OECD	Organisation for Economic Cooperation and Development.
PBT	Persistent, Bioaccumulative and Toxic.
PICCS	Philippines Inventory of Chemicals and Chemical Substances.
PNEC	Predicted No Effect Concentration.
REACH	Registration, Evaluation, Authorisation and restriction of Chemicals.
RID	The Regulations concerning the International Carriage of Dangerous Goods by Rail.
STOT-RE	Specific Target Organ Toxicity – Repeated Exposure.
STOT-SE	Specific Target Organ Toxicity – Single Exposure.

HDEO^{EP}



SVHC	Substance of Very High Concern.
TSCI	Taiwan Chemical Substance Inventory.
TWA	Time Weighted Average.
UN	United Nations.
UVCB	Chemical Substances of Unknown or Variable Composition, Complex Reaction Products and Biological Materials.
VOC	Volatile Organic Compound.
vPvB	Very Persistent and Very Toxic.

Key Literature and sources for data.

Work Health and Safety (WHS) regulations 2025.
 Australian Inventory of Chemical Substances (AICS) (NICNAS).
 Australian Code for the Transport of Dangerous Goods by Road and Rail approved by the Australian Transport Council as amended from time to time (regulation 5).
 Chemical Assessment Reports (NICNAS).
 Exposure Standards (Workplace Exposure Standards for Airborne Contaminants) 1st October 2022
 Hazardous Substances Information System Database
 Labelling of Workplace Hazardous Chemicals Code of Practice.
 Regulations (EC) No. 1907/2006 (REACH), 1272/2008 (CLP), 453/2010, 2015/830, 2020/878 as amended in each case.
 EC Directives 2000/39/EC, 2006/15/EC and 2009 161/EC, 2017/164/EU, 2019/1831/EU.
 National Threshold Limit Values of the corresponding countries amended in each case.
 Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.
 Safety Data Sheets and REACH registration data for individual components.
 Internal company information.

Classification and procedure used to derive the classification for mixtures according to Work Health and Safety (WHS) regulations 2025

Calculation method.

Further information

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.