



Safety Data Sheet

According to 1907/2006/EC, Article 31, Annex II as amended.

Substance: Esteroil

Revision: 24/03/2015, Version 2

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING	
1.1 Product identifier	
Trade name:	- P-15-S-0,25 / Esteroil / Viscosity 15mm ² /sec at 40°C / 9881846 - P-15-S-1 / Esteroil / Viscosity 15mm ² /sec at 40°C / 9885004
1.2 Relevant identified uses of the substance or mixture and uses advised against	
Application of the substance/ the preparation: Hydraulic fluid	
1.3 Details of the supplier of the safety data sheet	
REFCO Manufacturing Ltd. Industriestrasse 11 6285 Hitzkirch Switzerland Tel. +41 41 919 72 82 Fax +41 41 919 72 83 E-Mail: info@refco.ch	
1.4 Emergency telephone number	
Schweizerisches Toxikologisches Informationszentrum Zürich Telephone number in urgent matters: 145 or +41 44 251 51 51 Not urgent matters: +41 44 251 66 66	
* 2. HAZARDS IDENTIFICATION	
2.1 Classification of the substance or mixture	
Classification according to Directive 67/548/EEC or Directive 1999/45/EC The product has not been classified as hazardous and does not need to be labelled according to regulation (EU) no 1272/2008 (CLP).	
Classification according to Directive 67/548/EEC or 1999/45/EC as amended. The product is not classified according to Directive 67/548/EEC or Directive 1999/45/EC.	
Hazard summary Physical Hazards: No data available.	
2.2 Label elements not applicable	
2.3 Other hazards By handling of mineral oil products and chemical products no particular hazard is known when normal precautions (item 7) and personal protective equipment (item 8) are kept. The product may not be released into the environment without control.	
* 3. COMPOSITION/INFORMATION ON INGREDIENTS	
3.2 Mixtures	
General information:	Mixture based on biodegradable ester compounds in combination with special additives. The components are not hazardous or are below required disclosure limits.
* 4. FIRST AID MEASURES	
4.1 Description of first aid measures	
General Information:	Change clothes and shoes contaminated or soaked by the product. Never put rags contaminated by the product into cloth-pockets.
After inhalation:	Supply fresh air; consult doctor in case of symptoms.
After skin contact:	Wash with soap and water. The product is not skin irritating.
After eye contact:	Promptly wash eyes with plenty of water while lifting the eye lids.
Ingestion:	Rinse mouth thoroughly.



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* 4. FIRST AID MEASURES (Cont.)

4.2 Most important symptoms and effects, both acute and delayed

May cause skin and eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Hazards: No data available.

Treatment: Get medical attention if symptoms occur.

* 5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing agents:

CO₂, fire extinguishing powder or fog like water spraying. Extinguish larger fires with alcohol resistant foam or spray water with suitable tensides added.

For safety reasons unsuitable extinguishing agents:

Water with a full water jet.

5.2 Special hazards arising from the substance or mixture

During fire, gases hazardous to health may be formed.

5.3 Advice for firefighters

Special firefighting procedures:

No data available.

Special protective equipment for fire-fighters:

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

* 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

In case of spills, beware of slippery floors and surfaces.

6.2. Environmental precautions

Prevent from spreading (e.g. by binding or oil barriers).

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

6.4 Reference to other sections

See Section 8 of the SDS for Personal Protective Equipment. See Section 7 for information on safe handling See Section 13 for information on disposal.

* 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Provide adequate ventilation. Observe good industrial hygiene practices. Do not eat, drink or smoke when working with the product. Take usual precautions when handling mineral oil products or chemical products.

7.2 Conditions for safe storage, including any incompatibilities

Local regulations concerning handling and storage of waterpolluting products have to be followed. Prevent formation of aerosols. Do not heat up to temperatures close to the flash point.

7.3 Specific end use(s)

not applicable

Storage Class: 10, Combustible liquids

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* 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limits: None of the components have assigned exposure limits.

8.2 Exposure Controls

Appropriate engineering controls: No data available.

Personal protective equipment:

General protective and Hygienic measures:

Wash hands before breaks and after work. Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. The usual precautionary measures should be adhered to in handling the chemicals or the mineral oil products.

Breathing Equipment:



In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor. Avoid breathing vapour/ aerosol.

Protection of Hands:



Nitrile butyl rubber (NBR). Avoid long-term and repeated skin contact. Suitable gloves can be recommended by the glove supplier. Use skin protection cream for preventive skin protection. Protective gloves, where permitted in acc. to safety directions. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:



Safety glasses (EN 166) recommended during refilling.

Body protection:



Protective work clothing.

Thermal hazards:

No data available.

Hygiene measures:

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

Other:

Do not carry cleaning cloths impregnated with the product in trouser pockets. Wear suitable protective clothing.

Environmental Controls:

No data available.

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* 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Form	Liquid
Colour	Yellow
Smell	Characteristic
Melting point/Melting range	No data available
Boiling point/Boiling range	No data available
Flash point	156°C
Decomposition temperature	No data available
Self-inflammability	No data available
Danger of explosion	No data available
Density at 15°C	0,90 g/cm ³
Solubility in/ Miscibility with Water	Insoluble in water
Kinematic Viscosity at 40°C	14.8mm ² /s

* 10. STABILITY AND REACTIVITY

10.1 Reactivity

Stable under normal temperature conditions and recommended use.

10.2 Chemical stability

Thermal decompositions/ conditions to be avoided:

No data available.

10.3 Possibility of hazardous reactions

None under normal conditions.

10.4 Hazardous decomposition products

Avoid heat or contamination.

10.5 Incompatible Materials

Strong oxidizing substances. Strong acids. Strong bases.

10.6 Hazardous Decomposition Products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

* 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Oral: Not classified for acute toxicity based on available data.

Dermal: Not classified for acute toxicity based on available data.

Inhalation: Not classified for acute toxicity based on available data.

Repeated dose toxicity: No data available.

Skin Corrosion/Irritation: No data available.

Serious Eye Damage/Eye Irritation: No data available.

Respiratory or Skin Sensitization: No data available.

Germ Cell Mutagenicity

In vitro: No data available.

In vivo: No data available.

Carcinogenicity: No data available.

Reproductive toxicity: No data available.

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*	<p>11. TOXICOLOGICAL INFORMATION (Cont.)</p> <p>11.1 Information on toxicological effects (Cont.)</p> <p>Specific Target Organ Toxicity - Single Exposure No data available.</p> <p>Specific Target Organ Toxicity - Repeated Exposure No data available.</p> <p>Aspiration Hazard No data available.</p> <p>Other Adverse Effects No data available.</p>
*	<p>12. ECOLOGICAL INFORMATION</p> <p>12.1 Toxicity</p> <p>Aquatic toxicity:</p> <p>Fish Product: No data available. Aquatic Invertebrates Product: No data available.</p> <p>Chronic Toxicity</p> <p>Fish Product: No data available. Aquatic Invertebrates Product: No data available.</p> <p>12.2 Persistence and degradability No data available.</p> <p>12.3 Bioaccumulative potential No data available.</p> <p>12.4 Mobility in Soil No data available.</p> <p>12.5 Results of PBT and vPvB assessment No data available.</p> <p>12.6 Other Adverse Effects No data available.</p> <p>Water Hazard Class (WGK): WGK1: slightly water-endangering.</p>
*	<p>13. DISPOSAL CONSIDERATIONS</p> <p>13.1 Waste treatment methods</p> <p>General information: Dispose in accordance with all applicable regulations.</p> <p>Disposal methods: Do not empty into drains; dispose of this material and its container in a safe way. When storing used products, ensure that the waste categories and mixing instructions are observed.</p> <p>European Waste Codes: 13 01 12*: readily biodegradable hydraulic oils</p>



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14. TRANSPORT INFORMATION

Land transport ADR/RID and GGVSEB (cross-border/domestic):

ADR/RID-GGVSEB Class: -

Maritime transport IMDG/GGVSea:

IMDG/GGVSea Class: -

Marine pollutant: No

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA-Class: -

Special precautions for user: Not applicable.

Transport/ Additional information:

No dangerous good acc. to dangerous goods/ transport directions.

* 15. REGULATORY INFORMATIONS

15.1 Safety, health and environmental regulations/ legislation specific for the substance or mixture

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EU Regulations

Regulation (EC) No. 2037/2000 Substances that deplete the ozone layer: none

Regulation (EC) No. 850/2004 on persistent organic pollutants: none

Water Engendering Class 1 (Self-assessment): slightly hazardous for Water.

Substances of very high concern (SVHC) according to REACH, Article 31 out of the recent list: none

15.2 Chemical safety assessment:

No Chemical Safety Assessment has been carried out.

* 16. OTHER INFORMATION

Wording of the R-phrases and H-statements in section 2 and 3

none

Training information: Follow training instructions when handling this material.

Other information: The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies. The classification results from the Conventional Method mentioned in regulation EU 1272/2008 (CLP).

Revision Date: 24.03.2015

Disclaimer: The data contained in this safety data sheet are based on our current knowledge and experience and are given to the best of our knowledge and belief. It characterizes the product only with regard to safety requirements for handling, transport and disposal. The data do not describe the product's properties (tech. product specification). Neither should any agreed property nor the suitability of the product for any specific technical application be deduced from the data contained in this safety data sheet. Modifications on this document are not allowed. The data are not transferable to other products. In the case of mixing the product with other products or in the case of processing, the data in this safety data sheet are not necessarily valid for the new-made material. It is the responsibility of the recipient of the product to observe federal, state and local law. Please contact us to obtain up-to-date safety data sheets. This document was issued electronically and has no signature.

* **Data compared to the previous version altered.**

The asterisk (*) on the left side indicate the respective changes from the previous version.

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