



Safety Data Sheet

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

Substance: Esteroil

Revision: 30.09.2021, Version 3.1

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/sec at 40°C / 9881846 - P-15-S-1 / Esteroil / Viscosity 15mm/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 Regulation (EC) No 1272/2008 as amended.	
Hazard summary	
Physical Hazards: No data available.	
2.2 Label elements	
EUH208: Contains Triazole amine derivative. May produce an allergic reaction. EUH210: Safety data sheet available on request.	
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.

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Chemical name	Identifier	Concentration *	REACH Registration No.	Notes
Triazole amine derivative	EC: 401-280-0	0,01% - <0,10%	01-2119930450-49	
<p>* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. PBT: persistent, bioaccumulative and toxic substance. vPvB: very persistent and very bioaccumulative substance.</p>				
Classification				
Chemical name	Identifier	Classification		
Triazole amine derivative	EC: 401-280-0	CLP:	Skin Corr. 1B;H314, Skin Sens. 1A;H317, Aquatic Chronic 1;H410, Eye Dam. 1;H318	
CLP: Regulation No. 1272/2008.				

* 4. FIRST AID MEASURES

General: Instantly remove any clothing soiled by the product.

4.1 Description of first aid measures

Inhalation: Supply fresh air; consult doctor in case of symptoms.

Eye contact: Promptly wash eyes with plenty of water while lifting the eye lids.

Skin Contact: Wash with soap and water.

Ingestion: Rinse mouth thoroughly.

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

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.



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5.3 Advice for firefighters

Special firefighting procedures:

Move container from fire area if it can be done without risk. Dispose of fire debris and contaminated firefighting water in accordance with official regulations. Collect contaminated firefighting water separately. It must not enter drains.

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). Avoid release to the environment. Environmental manager must be informed of all major spillages. Prevent further leakage or spillage if safe to do so. Do not allow to enter drainage system, surface or ground water.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acidbinders, universal binders, sawdust). Dispose of the material collected according to regulations. Stop the flow of material, if this is without risk.

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

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

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)

No data available

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:

Provide adequate ventilation. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain air-borne levels to an acceptable level.

Individual protection measures, such as 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:

Material: Nitrile butyl rubber (NBR).
Min. Breakthrough time: ≥ 480 min
Recommended thickness of the material: $\geq 0,38$ mm

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. Avoid contact with skin and eyes. Goggles/face shield are recommended. If risk of splashing, wear safety goggles or face shield.

Other:

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

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

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remove contaminants. Discard contaminated footwear that cannot be cleaned.

Environmental Controls: No data available.

* 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Form	Liquid
Colour	Yellow
pH	substance/mixture is non-soluble (in water)
Freezing point:	not determined
Boiling Point:	not determined
Flash Point:	156 °C
Evaporation Rate:	Not applicable for mixtures
Flammability (solid, gas):	not determined
Flammability Limit - Upper (%)-:	Not applicable for mixtures
Flammability Limit - Lower (%)-:	Not applicable for mixtures
Vapor pressure:	Not applicable for mixtures
Relative vapor density:	Not applicable for mixtures
Density:	0,90 g/ml (15,00 °C)
Solubility(ies)	
Solubility in Water:	Insoluble in water
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	Not applicable for mixtures
Autoignition Temperature:	not determined
Decomposition Temperature:	not determined
Kinematic viscosity:	14,8 mm ² /s (40,00 °C)
Explosive properties:	Value not relevant for classification
Oxidizing properties:	Value not relevant for classification
Particle characteristics:	Not applicable

9.32 other information

No data available

* 10. STABILITY AND REACTIVITY

10.1 Reactivity

Stable under normal use conditions.

10.2 Chemical stability

Stable under normal use conditions.



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10.3 Possibility of hazardous reactions

Stable under normal use conditions.

10.4 Hazardous decomposition products

Stable under normal use conditions.

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.

Skin Corrosion/Irritation: Based on available data, the classification criteria are not met.

Serious Eye Damage/Eye Irritation: Based on available data, the classification criteria are not met.

Respiratory or Skin Sensitization: Based on available data, the classification criteria are not met.

Germ Cell Mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Product: Based on available data, the classification criteria are not met.

Reproductive toxicity

Product: Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Single Exposure

Product: Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Repeated Exposure

Product: Based on available data, the classification criteria are not met.

Aspiration Hazard

Product: Based on available data, the classification criteria are not met.

Other adverse effects: No data available.

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* 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic toxicity:

Based on available data, the classification criteria are not met

Chronic Toxicity

Based on available data, the classification criteria are not met

12.2 Persistence and degradability

Biodegradation

Not applicable for mixtures.

12.3 Bioaccumulative potential

Not applicable for mixtures.

12.4 Mobility in soil

Not applicable for mixtures.

12.5 Results of PBT and vPvB assessment

The product does not contain any substances fulfilling the PBT/vPvB criteria.

12.6 Other Adverse Effects

No data available.

Water Hazard Class (WGK): WGK1: slightly water-endangering.

* 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

General information: Dispose in accordance with all applicable regulations.

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.

European Waste Codes: 13 01 12*: readily biodegradable hydraulic oils

14. TRANSPORT INFORMATION

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

ADR/RID-GGVSEB Class: -

Maritime transport IMDG/GGVSea:



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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	
15.1 Safety, health and environmental regulations/ legislation specific for the substance or mixture	
EU Regulations	
EU. Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex I, Controlled Sub-stances: none	
EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), as amended: 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	
H314 Causes severe skin burns and eye damage.	
H317 May cause an allergic skin reaction.	
H318 Causes serious eye damage.	
H410 Very toxic to aquatic life with long lasting effects.	
Other information:	
The classification complies with the current EU lists; however, it has been supplemented with expert literature information and information provided by/about our company. The following evaluation methods were used: - On the basis of test data - Calculation Method - Bridging Principle "Substantially similar mixtures" - Expert Judgement	
Revision Date: 30.09.2021	
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	



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