



SAFETY DATA SHEET HYDRAULIC POWER STEER

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name HYDRAULIC POWER STEER

Product number HPF500, HPF001

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

Identified uses Hydraulic oil.

1.3. Details of the supplier of the safety data sheet

Supplier TETROSYL EUROPE
79 rue du chemin vert
59.273 Fretin
TEL: 03 20 28 06 30
qualite@tetrosyl-france.com

Manufacturer TETROSYL LIMITED
Bury
Lancashire
England
BL9 7NY
0161 764 5981
0161 797 5899
info@tetrosyl.com

1.4. Emergency telephone number

Emergency telephone +44 (0)161 764 5981 (24 hrs)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720)

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Aquatic Chronic 3 - H412

2.2. Label elements

Hazard statements EUH208 Contains 2-PROPANOL, 1-(TERT-DODECYLTHIO)-, 1,2-PROPANEDIOL, 3-AMINO-, N,N-DICOCO ALKYL DERIVS.. May produce an allergic reaction.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P273 Avoid release to the environment.
P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards

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Not applicable.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

<p>PENTADECANE, 7- METHYLENE MIXED WITH 1-TETRADECENE, DIMERS AND TRIMERS, HYDROGENATED</p> <p>CAS number: 157707-86-3 EC number: 500-393-3</p>	<p>60-100%</p>
<p>Classification Asp. Tox. 1 - H304</p>	
<p>MINERAL OIL - H304 (<3% DMSO EXTRACT, IP 346)</p> <p>CAS number: 64742-55-8 EC number: 265-158-7 UK REACH registration number: UK-01-6871927170-9-0000</p>	<p>5-<10%</p>
<p>Classification Asp. Tox. 1 - H304</p>	
<p>THIOPHENE, TETRAHYDRO-,1,1-DIOXIDE,3-(C9-11-ISOALKYLOXY)DERIVS.,C10-RICH</p> <p>CAS number: 398141-87-2 EC number: 800-172-4 UK REACH registration number: UK-01-7851359001-4-0000</p>	<p>1-<2%</p>
<p>Classification Aquatic Chronic 2 - H411</p>	
<p>2-PROPANOL, 1-(TERT-DODECYLTHIO)-</p> <p>CAS number: 67124-09-8 EC number: 266-582-5 UK REACH registration number: UK-01-6538277938-0-0000</p> <p>M factor (Acute) = 1 M factor (Chronic) = 1</p>	<p>0.5-<1%</p>
<p>Classification Skin Sens. 1 - H317 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410</p>	
<p>1,2-PROPANEDIOL, 3-AMINO-, N,N-DICOCO ALKYL DERIVS.</p> <p>CAS number: — EC number: 482-000-4 UK REACH registration number: UK-01-3194462276-5-0000</p>	<p>0.3-<0.5%</p>
<p>Classification Skin Sens. 1B - H317 Aquatic Chronic 3 - H412</p>	

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PHOSPHORIC ACID 100%	<0.1
CAS number: 7664-38-2	EC number: 231-633-2
Classification	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
1H-IMIDAZOLE-1-ETHANOL, 2-(8-HEPTADECENYL)-4,5-DIHYDRO-	--<0.05
CAS number: 95-38-5	EC number: 202-414-9
	UK REACH registration number: UK-01-9355364641-0-0000
M factor (Acute) = 10	M factor (Chronic) = 1
Classification	
Acute Tox. 4 - H302	
Skin Corr. 1C - H314	
Eye Dam. 1 - H318	
STOT RE 2 - H373	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	
2,2'-(C16-18 (EVENNUMBERED, C18 UNSATURATED) ALKYL IMINO) DIETHANOL	--<0.05
CAS number: 1218787-32-6	EC number: 620-540-6
	UK REACH registration number: UK-01-4235348018-1-0000
M factor (Acute) = 10	M factor (Chronic) = 1
Classification	
Acute Tox. 4 - H302	
Skin Corr. 1C - H314	
Eye Dam. 1 - H318	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	
BUTANOL-norm	--<0.05
CAS number: 71-36-3	EC number: 200-751-6
Classification	
Flam. Liq. 3 - H226	
Acute Tox. 4 - H302	
Skin Irrit. 2 - H315	
Eye Dam. 1 - H318	
STOT SE 3 - H335, H336	

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DIPROPYLENE GLYCOL MONOMETHYL ETHER	0.001 - <0.005%
CAS number: 34590-94-8	EC number: 252-104-2
Classification Not Classified	
SULPHUR DIOXIDE	0.001 - <0.005%
CAS number: 7446-09-5	EC number: 231-195-2
Classification Acute Tox. 3 - H331 Skin Corr. 1B - H314 Eye Dam. 1 - H318	
NAPHTHALENE	0.001 - <0.005%
CAS number: 91-20-3	EC number: 202-049-5
M factor (Acute) = 1	M factor (Chronic) = 1
Classification Flam. Sol. 2 - H228 Acute Tox. 4 - H302 Carc. 2 - H351 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Get medical attention if any discomfort continues. Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Inhalation	If spray/mist has been inhaled, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Ingestion	Contact physician if larger quantity has been consumed. Rinse mouth thoroughly with water.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Do not rub eye.

4.2. Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure. Effects may be delayed. Keep affected person under observation.
Inhalation	May cause an asthma-like shortness of breath. Vapours may cause headache, fatigue, dizziness and nausea.
Ingestion	May cause discomfort if swallowed. May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication.
Skin contact	Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.

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Eye contact May cause temporary eye irritation.

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

Notes for the doctor No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with the following media: Foam, carbon dioxide or dry powder. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Fire creates: Carbon monoxide (CO). Carbon dioxide (CO₂). No unusual fire or explosion hazards noted.

Hazardous combustion products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon.

5.3. Advice for firefighters

Special protective equipment for firefighters Leave danger zone immediately.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of vapours. Avoid contact with eyes and prolonged skin contact. Provide adequate ventilation. In case of spills, beware of slippery floors and surfaces.

6.2. Environmental precautions

Environmental precautions Avoid or minimise the creation of any environmental contamination. Do not discharge into drains or watercourses or onto the ground. Collect and dispose of spillage as indicated in Section 13.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if possible without risk. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Provide adequate ventilation. Contain spillage with sand, earth or other suitable non-combustible material. Avoid the spillage or runoff entering drains, sewers or watercourses. Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. Collect and dispose of spillage as indicated in Section 13. The product contains a substance which is hazardous to aquatic organisms and which may cause long term adverse effects in the aquatic environment. See Section 12 for additional information on ecological hazards.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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Usage precautions

Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Do not eat, drink or smoke when using the product. Avoid the formation of mists. Provide adequate ventilation. Always remove oil with soap and water or skin cleaning agent, never use organic solvents. Do not use oil-contaminated clothing or shoes, and do not put rags moistened with oil into pockets.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep containers upright. Store in tightly-closed, original container.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

PHOSPHORIC ACID 100%

Long-term exposure limit (8-hour TWA): WEL 1 mg/m³

Short-term exposure limit (15-minute): WEL 2 mg/m³

BUTANOL-norm

Short-term exposure limit (15-minute): WEL 50 ppm 154 mg/m³

Sk

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Long-term exposure limit (8-hour TWA): WEL 50 ppm 308 mg/m³

Sk

SULPHUR DIOXIDE

Long-term exposure limit (8-hour TWA): WEL 1 ppm 2.6 mg/m³

Short-term exposure limit (15-minute): WEL 1 ppm 2.6 mg/m³

NAPHTHALENE

Long-term exposure limit (8-hour TWA): 10 53

Short-term exposure limit (15-minute): 15 80

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through the skin.

MINERAL OIL - H304 (<3% DMSO EXTRACT, IP 346) (CAS: 64742-55-8)

DNEL

Workers - Dermal; Long term systemic effects: 0.97 mg/kg

Workers - Inhalation; Long term local effects: 5.58 mg/m³

Workers - Inhalation; Long term systemic effects: 2.73 mg/m³

General population - Oral; Long term systemic effects: 0.74 mg/kg

General population - Inhalation; Long term local effects: 1.19 mg/m³

THIOPHENE, TETRAHYDRO-,1,1-DIOXIDE,3-(C9-11-ISOALKYLOXY)DERIVS.,C10-RICH (CAS: 398141-87-2)

DNEL

General population - Dermal; Long term systemic effects: 125 mg/kg

Workers - Dermal; Long term systemic effects: 350 mg/kg

Workers - Inhalation; Long term systemic effects: 24.7 mg/m³

General population - Inhalation; Long term systemic effects: 4.35 mg/m³

General population - Oral; Long term systemic effects: 2.5 mg/kg

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PNEC Soil; 0.0853 mg/kg
Sediment (Freshwater); 0.433 mg/kg
Sediment (Marinewater); 0.0596 mg/kg
STP; 100 mg/l

2-PROPANOL, 1-(TERT-DODECYLTHIO)- (CAS: 67124-09-8)

DNEL General population - Oral; Long term systemic effects: 0.84 mg/kg
General population - Inhalation; Long term systemic effects: 2.9 mg/m³
General population - Dermal; Long term systemic effects: 1.67 mg/kg
Workers - Dermal; Long term systemic effects: 3.34 mg/kg
Workers - Inhalation; Long term systemic effects: 11.8 mg/m³

PNEC Soil; 0.244 mg/kg
Sediment (Freshwater); 8.28 mg/kg
Fresh water; 0.006 mg/l
Sediment (Marinewater); 0.828 mg/kg
marine water; 0.001 mg/l

ALCOHOLS, C9-11-ISO, C10 RICH (CAS: 68526-85-2)

PNEC Sediment (Freshwater); 0.48 mg/kg
STP; 4.3 mg/l
Soil; 0.19 mg/kg
Fresh water; 0.023 mg/l
marine water; 0.002 mg/l
Sediment (Marinewater); 0.05 mg/kg

METHYL-1H-BENZOTRIAZOLE (CAS: 29385-43-1)

DNEL General population - Inhalation; Long term systemic effects: 4.4 mg/m³
General population - Oral; Short term systemic effects: 0.25 mg/kg
Workers - Dermal; Long term systemic effects: 0.5 mg/kg
General population - Oral; Long term systemic effects: 0.25 mg/kg
Workers - Inhalation; Long term systemic effects: 8.8 mg/m³
General population - Dermal; Long term systemic effects: 0.25 mg/kg

PNEC Soil; 0.002 mg/kg
Fresh water; 0.008 mg/l
Sediment (Marinewater); 0.003 mg/kg
marine water; 0.008 mg/l
Sediment (Freshwater); 0.003 mg/kg
STP; 39.4 mg/l

1H-IMIDAZOLE-1-ETHANOL, 2-(8-HEPTADECENYL)-4,5-DIHYDRO- (CAS: 95-38-5)

DNEL Workers - Dermal; Short term systemic effects: 2 mg/kg
Workers - Inhalation; Short term systemic effects: 14 mg/m³
Workers - Inhalation; Long term systemic effects: 0.46 mg/m³
Workers - Dermal; Long term systemic effects: 0.06 mg/kg

PNEC Sediment (Marinewater); 0.038 mg/kg
Sediment (Freshwater); 0.376 mg/kg
Soil; 0.075 mg/kg
STP; 0.27 mg/l

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NAPHTHALENE (CAS: 91-20-3)

DNEL	Workers - Dermal; Long term systemic effects: 3.57 mg/kg Workers - Inhalation; Long term local effects: 25 mg/m ³ Workers - Inhalation; Long term systemic effects: 25 mg/m ³
PNEC	Sediment (Freshwater); 0.0672 mg/kg Sediment (Marinewater); 0.0672 mg/kg STP; 2.9 mg/l Soil; 0.0533 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Nitrile rubber. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended.

Other skin and body protection

Wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene measures

Wash contaminated clothing before reuse. Wash promptly with soap and water if skin becomes contaminated.

Respiratory protection

No specific recommendations.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Dark. Green.
Odour	Oil-like.
Melting point	Not determined.
Initial boiling point and range	>250°C @ 1013 hPa
Flash point	220°C
Evaporation rate	Not determined.
Upper/lower flammability or explosive limits	Not determined.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	0.834g/cm ³ @ 20°C

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Solubility(ies)	Insoluble in water.
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	29 mm ² /s @ 40°C
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information	None.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	No particular stability concerns.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not applicable.
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10.4. Conditions to avoid

Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.
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10.5. Incompatible materials

Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Does not decompose when used and stored as recommended.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects	No information available.
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Acute toxicity - oral

Summary	Based on available data the classification criteria are not met.
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Acute toxicity - dermal

Summary	Based on available data the classification criteria are not met.
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Acute toxicity - inhalation

Summary	Based on available data the classification criteria are not met.
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Skin corrosion/irritation

Summary	Based on available data the classification criteria are not met.
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Serious eye damage/irritation

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

Respiratory sensitisation

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

Skin sensitisation

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

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

Specific target organ toxicity - single exposure

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

Specific target organ toxicity - repeated exposure

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

Aspiration hazard

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

Inhalation No specific health hazards known.

Ingestion May cause discomfort if swallowed.

Skin contact Prolonged and frequent contact may cause redness and irritation. May cause an allergic skin reaction.

Eye contact May cause temporary eye irritation.

SECTION 12: Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish Not available.

Acute toxicity - aquatic invertebrates Not available.

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

12.4. Mobility in soil

Mobility The product is insoluble in water and will spread on the water surface.

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Adsorption/desorption coefficient Not available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current UK criteria.

12.6. Other adverse effects

Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods Confirm disposal procedures with environmental engineer and local regulations.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

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

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

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Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Issued by	Regulatory Department
Revision date	25/01/2022
Revision	12
Supersedes date	04/02/2021
SDS number	17613
SDS status	Approved.
Hazard statements in full	H228 Flammable solid. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H351 Suspected of causing cancer. H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects. EUH208 Contains 2-PROPANOL, 1-(TERT-DODECYLTHIO)-, 1,2-PROPANEDIOL, 3-AMINO-, N,N-DICOCO ALKYL DERIVS.. May produce an allergic reaction.