



PRODUCT INFORMATION SHEET

CARLUBE HYDRAULIC 32

DESCRIPTION

Carlube Hydraulic 32 is a highly refined fully inhibited hydraulic oil covering the viscosity ISO 32. It is chemically and thermally stable and has good demulsibility, allowing rapid separation of any water contamination. Carlube Hydraulic 32 is classified HM in the ISO 6743 grading system.

ADVANTAGES

- Excellent lubrication of pumps, valves and actuators
- Good resistance to foaming and cavitation
- Compatible with conventional sealing materials (e.g. Nitrile, Buna-N, Viton)
- Good protection against rust and corrosion

APPLICATION

Carlube Hydraulic 32 oil is suitable for use in systems employing vane or gear pumps operating at low or high pressures and temperatures. It is also suitable for use in certain machine tools, industrial plant etc. Can also be used in some torque converter applications.

PERFORMANCE LEVEL

- AFNOR NF E 48-600
- Cincinnati Milacron P-68-70
- DIN 51524, Part 2
- Thyssen TH N-256132
- Vickers I-286-S (Industrial)
- CETOP R91H
- Denison Filterability TP 02100
- ISO 6743/4 HM
- U.S. Steel 127
- Vickers M-2950-S (Mobile)

PROPERTIES

SAE Viscosity Grade		32
Density @ 15°C		0.879
Kinematic Viscosity (mm ² /s)	@ 40°C	32.0
	@ 100°C	5.40
Viscosity Index (VI)		100
Pour Point (°C)		-18
Flash Point (°C)		194

AVAILABILITY

4.55 Litre – XFP455 25 Litre – YFP025 199 Litre – YFP199

ENVIRONMENTAL PROTECTION/SAFETY PRECAUTIONS

Do not pour used oil down sewers or drains. Dispose of used oil at your nearest oil-recycling bank. Dispose of empty packs in a responsible manner. Store container in an upright position and secure when transported. Wear goggles if splashing risk. Avoid exposure to oil mist. When using oil do not eat, drink and smoke. Wash hands after use. Always refer to vehicle or engine manufacturers handbook to verify suitability of this product for the vehicle/engine.

**DISCLAIMER**

This Product Information Sheet does not constitute to any extent a fitness for purpose warranty or a quality specification. It is intended to be indicative only of the general characteristics of the product(s) and may not be relied upon (in whole or in part) in substitution of nor as a supplement to any of the information and/or instructions and/or warnings set out on the product(s) and/or on any packaging and/or in the relevant Safety Data Sheet (which is available on request).

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This Product Information Sheet does not apply to the use of the product(s) in any combination or with other products or materials.

Users of a product or products marked "For Professional Use Only" are deemed to declare and acknowledge for themselves professional levels of skill, knowledge, competence and experience in the selection and use of such product(s).

Product Information Sheets are updated from time to time and inquiries should be made on a regular basis to ensure that this is the latest version available.

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SAFETY DATA SHEET 32 HYDRAULIC OIL

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

1.1. Product identifier

Product name 32 HYDRAULIC OIL
Product No. MAC422, XBC032, XFP455, XHJ501, YFP025, YFP199, YFP205

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

Identified uses Engine oil.

1.3. Details of the supplier of the safety data sheet

Supplier TETROSYL LIMITED
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0161 764 5981
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info@tetrosyl.com

1.4. Emergency telephone number

0161 764 5981

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Not classified.
Human health
See section 11 for additional information on health hazards.

2.2. Label elements

Risk Phrases	NC	Not classified.
Safety Phrases	S2 S46	Keep out of the reach of children. If swallowed, seek medical advice immediately and show this container or label.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

32 HYDRAULIC OIL

2-ETHYLHEXYL ZINC DITHIOPHOSPHATE			<1%
CAS-No.: 4259-15-8	EC No.: 224-235-5	Registration Number: 01-2119493635-27-0000	
Classification (EC 1272/2008) Aquatic Chronic 2 - H411		Classification (67/548/EEC) N;R51/53.	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES**4.1. Description of first aid measures****General information**

Remove affected person from source of contamination. Get medical attention if any discomfort continues.

Inhalation

Get medical attention if any discomfort continues.

Ingestion

Consult a physician for specific advice.

Skin contact

Promptly wash contaminated skin with soap or mild detergent and water. Promptly remove clothing if soaked through and wash as above.

Eye contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. 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 dependant of the concentration and the length of exposure.

NOTE! 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 redness, itching, irritation and eczema/chapping. Allergic rash.

Eye contact

May cause temporary eye irritation.

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

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES**5.1. Extinguishing media****Extinguishing media**

Use fire-extinguishing media appropriate for surrounding materials.

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**Hazardous combustion products**

During fire, toxic gases (CO, CO₂) are formed.

32 HYDRAULIC OIL**Unusual Fire & Explosion Hazards**

No unusual fire or explosion hazards noted.

Specific hazards

Fire creates: Carbon monoxide (CO). Carbon dioxide (CO₂).

5.3. Advice for firefighters**Special Fire Fighting Procedures**

No specific fire fighting procedure given.

Protective equipment for fire-fighters

Leave danger zone immediately.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

For personal protection, see section 8. In case of spills, beware of slippery floors and surfaces.

6.2. Environmental precautions

The product should not be dumped in nature but collected and delivered according to agreement with the local authorities.

6.3. Methods and material for containment and cleaning up

For waste disposal, see section 13. When dealing with a spillage, please consult the section relating to suitable protective measures. Provide ventilation and confine spill. Do not allow runoff to sewer. Absorb spillage with non-combustible, absorbent material.

6.4. 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.

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Do not eat, drink or smoke when using the product. Avoid forming spray/aerosol mists. Provide good ventilation. Avoid contact with skin and eyes. 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

Keep upright. Store in tightly closed original container.

7.3. 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****8.2. Exposure controls****Protective equipment****Process conditions**

Use engineering controls to reduce air contamination to permissible exposure level.

32 HYDRAULIC OIL**Engineering measures**

Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours.

Respiratory equipment

No specific recommendations.

Hand protection

Protective gloves should be used if there is a risk of direct contact or splash. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable.

Eye protection

Wear approved, tight fitting safety glasses where splashing is probable.

Other Protection

Wear suitable protective clothing as protection against splashing or contamination.

Hygiene measures

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Appearance	Clear Oily Liquid
Colour	Straw.
Odour	Oil smell.
Solubility	Insoluble in water
Initial boiling point and boiling range	>250°C
Melting point (°C)	Scientifically unjustified.
Relative density	0.863 - 0.889 15
Vapour density (air=1)	Scientifically unjustified.
Vapour pressure	Scientifically unjustified.
Evaporation rate	Scientifically unjustified.
pH-Value, Conc. Solution	Scientifically unjustified.
Viscosity	30 - 34 cSt 40
Decomposition temperature (°C)	Scientifically unjustified.
Odour Threshold, Lower	Scientifically unjustified.
Odour Threshold, Upper	Scientifically unjustified.
Flash point (°C)	200°C
Auto Ignition Temperature (°C)	Scientifically unjustified.
Flammability Limit - Lower(%)	Scientifically unjustified.
Flammability Limit - Upper(%)	Scientifically unjustified.
Partition Coefficient (N-Octanol/Water)	Scientifically unjustified.
Oxidising properties	Not determined.

32 HYDRAULIC OIL**9.2. Other information****SECTION 10: STABILITY AND REACTIVITY****10.1. Reactivity**

No specific reactivity hazards associated with this product.

10.2. Chemical stability

No particular stability concerns.

10.3. Possibility of hazardous reactions

Not applicable.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials To Avoid

Strong oxidising substances.

10.6. Hazardous decomposition products

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

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**

Toxic Dose 1 - LD 50 >2000 (Petroleum Distillated [Solvents Neutral]) mg/kg (oral rat)

Toxicological information

No information available.

Skin contact

Prolonged and frequent contact may cause redness and irritation.

Eye contact

May cause temporary eye irritation.

Health Warnings

Because of quantity and composition, the health hazard is small.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Not regarded as dangerous for the environment.

12.1. Toxicity

Acute Toxicity - Fish

Not determined.

Acute Toxicity - Aquatic Invertebrates

Not determined.

Acute Toxicity - Aquatic Plants

Not determined.

12.2. Persistence and degradability

Degradability

No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

12.4. Mobility in soil

Mobility:

The product is insoluble in water.

32 HYDRAULIC OIL

Adsorption/Desorption Coefficient

Not available.

12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Absorb in vermiculite or dry sand and dispose of at a licenced hazardous waste collection point.

SECTION 14: TRANSPORT INFORMATION

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

14.1. UN number**14.2. UN proper shipping name****14.3. Transport hazard class(es)**

ADR/RID/ADN Class Not classified for transportation.

Transport Labels

No transport warning sign required.

14.4. Packing group**14.5. Environmental hazards****14.6. Special precautions for user****14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code****SECTION 15: REGULATORY INFORMATION****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

UK Regulatory References

The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.

EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

15.2. Chemical Safety Assessment**SECTION 16: OTHER INFORMATION**

General information

Only trained personnel should use this material.

Revision Comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Issued By HS&E Manager.

32 HYDRAULIC OIL

Revision Date 20/07/2011

Revision 7

Supersedes date 29/06/2011 v6

Safety Data Sheet Status Approved.

Risk Phrases In Full

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazard Statements In Full

H411 Toxic to aquatic life with long lasting effects.

Disclaimer

The information provided in this document has been compiled on the basis of our current knowledge and is believed to be in accordance with the requirements of the Dangerous Substances Directive, Dangerous Preparations Directive and Safety Data Sheets Directive. The information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any particular conditions or process. The conditions and extent of storage and use of material are outside of our control and within the control of the possessor or user. Consequently it is the responsibility of the possessor or user to satisfy themselves as to the completeness of such information and the suitability of the material for their own particular circumstances, conditions or use.