

Product Data Sheet

TomoilTM Hydraulic Oil HVLP 46 Zinc Free

Hydraulic oil

Product description

TomoilTM Hydraulic Oil HVLP 46 Zinc Free stands as a cutting-edge hydraulic lubricant tailored to address the needs of contemporary high-pressure hydraulic systems, commonly found in industrial and mobile equipment. Comprising premium hydro-treated base stocks and specialized zinc-free additives, it delivers unmatched protection by resiliently combating wear, particularly in challenging hydraulic settings.

Application

- Systems employing multi-metal designs in pumps and other components
- Applications where cross-contamination of hydraulic fluids and coolants can occur
- High pressure vane, piston and gear pumps
- Where small amounts of water are unavoidable
- In systems containing gears and bearings
- Systems requiring a high degree of load-carrying capability and anti-wear protection

Features & Benefits

- High oxidation resistance and thermal stability
- Exceptional anti-wear properties
- Outstanding oil film strength
- Excellent demulsibility characteristics
- Fast air release and low foaming
- Multi metal compatibility

Typical Properties

Property	Unit	Test method	Typical value
ISO viscosity grade	-	-	46
Density at 15°C	g/cm ³	ASTM D4052	0.875
Kinematic Viscosity at 40°C	mm ² /s	ASTM D445	46
Kinematic Viscosity at 100°C	mm ² /s	ASTM D445	8.15
Viscosity Index	-	ASTM D2270	150

Flash Point (COC)	°C	ASTM D92	220
Pour Point	°C	ASTM D97	-39
Water separability	min	ASTM D7451	15
-time to 3 ml emulsion min	min	ASTM D7451	15
Oxidation Stability after 1000h/TAN increase	min	ASTM D4310	<1.0
Copper Strip Corrosion, 3 h, 100 °C	-	ASTM D130	1
Rust-Preventing Characteristics, A&B	-	ASTM D665	Pass
FZG EP Wear Test (A 8.3/90)	-	ASTM D 5182	12
Failure Load Stage	-	ASTM D 5182	12

Typical property characteristics are based on current production. Whilst future production will conform to TomoilTM specifications, variations in these characteristics may occur.

Performance claims

- DIN 51524- 3
- ISO 6743/4 (HV)
- Denison HF-0/HF-1/HF-2
- Cincinnati Machine P-70
- ISO 11158 (HV)
- AFNOR NF E 48-603 (HV)
- SIS SS 155434
- SEB 181 222
- U.S. Steel 126/127
- GM LS-2
- JCMAS P041 HK

Health, Safety & Environment

• Health and Safety

This product is unlikely to present any significant health or safety hazard when properly used in the recommended application, and good standards of industrial and personal hygiene are maintained.

For further guidance on Product Health & Safety refer to the appropriate Safety Data Sheet which can be obtained upon request or through our website: www.tomoil.de

• Protect the Environment

Take used oil to an authorized collection point. Do not discharge into drains, soil or water.

Available pack sizes

- 1 L Canister plastic
- 4 L Canister plastic
- 5 L Canister plastic
- 6 L Canister plastic
- 7 L Canister plastic
- 20 L Canister plastic
- 30 L Canister plastic
- 60 L Drum sheet metal
- 200 L Drum sheet metal
- 1000 L Container

Storage

- We recommend to store all packages under cover.
- Where outside storage is unavoidable drums should be laid horizontally to avoid the possible ingress of water and damage to drum markings.
- Products should not be stored above 60 °C, exposed to hot sun or freezing conditions.

Notes

This data sheet and the information it contains is believed to be accurate as of the date of printing. However, no warranty or representation, express or implied, is made as to its accuracy or completeness. Data provided is based on standard tests under laboratory conditions and is given as a guide only. Users are advised to ensure that they refer to the latest version of this data sheet. It is the responsibility of the user to evaluate and use products safely, to assess suitability for the intended application and to comply with all applicable laws and regulations. Safety Data Sheets are available for all our products and should be consulted for appropriate information regarding storage, safe handling, and disposal of the product. No responsibility is taken by ALCO LLC for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from hazards inherent in the nature of the material. All products, services and information supplied are provided under our standard conditions of sale. You should consult our sales specialists if you require any further information.

