

# PRODUCT DATA SHEET PALFINGER HYDRAULIC OIL 32

### **EXTREME**

- Special application Genuine PALFINGER Hydraulic fluid for versatile use in extremely cold temperatures as low as -50°C as and exposed forestry operations.
- Unique formulation with zinc free anti wear additive technology for extended fluid life and excellent wear protection, meeting highest PALFINGER & Industry Standards. With its specially selected base fluids, it has the widest operating temperature range in the PALFINGER lubricants portfolio
- Its reduced environmental impact (low toxicity towards aquatic life) can help to manage the environmental impact of operations.
- Available in ISO VG 32

## **PERFORMANCE & BENEFITS**

#### LOW TEMPERATURE SYSTEM OPERATION & IMPROVED EFFICIENCY

- Very high viscosity index (VI) to ensure the hydraulic fluid flows at temperatures where conventional hydraulic oils would become too thick to allow mobile equipment operation.
- An extra-low pour point for enhanced low-temperature flow to ensure easy & safe start-up under very-cold conditions with no or minimum heating of the hydraulic system required
- Delivers increased equipment availability and more efficient operation of the hydraulic system to achieve higher productivity from PALFINGER equipment.
- Energy losses due to pumping hydraulic fluid at low temperatures are controlled.
- PALFINGER Hydraulic Oil EXTREME is designed to operate your equipment for longer without interruption for reduced maintenance requirements and maximizing productivity by helping equipment to meet or exceed its design capabilities.

#### **VERY WIDE OPERATING TEMPERATURE RANGE**

- The extra high viscosity index of 300 of the fresh fluid combined with high mechanical shear stability allows an operating temperature range up to 28% wider than conventional HM & HV fluids for protection at very low temperatures.
- Delivers responsive operation all year round as long as the maximum operating temperature does not exceed 75°C.

#### **EXCELLENT EQUIPMENT PROTECTION**

- PALFINGER Hydraulic Oil EXTREME protects the critical components of the hydraulic system on PALFINGER equipment from wear and damage to help equipment to last longer.
- Through its high an oxidative stability of a minimum of 5.000 hours (TOST life) PALFINGER Hydraulic Oil EXTREME also helps to extend equipment maintenance intervals and reduce equipment downtime by resisting thermal and chemical breakdown, minimizing harmful sludge formation and providing better reliability and system cleanliness.

## APPLICATIONS

#### **MOBILE & EXPOSED LOW TEMPERATURE HYDRAULIC APPLICATIONS**

- PALFINGER Hydraulic Oil EXTREME is used as running in & initial fill oil in PALFINGER products. It can be used in all types of current and older PALFINGER equipment and generally in hydraulic systems subjected to extremely low ambient temperatures and where the operating temperature does not continuously exceed 75°C. For operating temperatures greater than this Palfinger Hydraulic Oil 32 is recommended.
- Specifically designed for systems that must start-up and work reliably at extremely low temperatures and subsequently increasing temperature during the operation of the equipment.

#### PRECISION HYDRAULIC SYSTEMS

- PALFINGER Hydraulic Oil EXTREME provides good control of fluid viscosity and excellent fluid filterability, even when contaminated, all required by modern precision hydraulic systems.
- Its superior temperature-viscosity stability compared to many ISO HV fluids supports improving the performance of such systems.

## **SPECIFICATIONS & APPROVALS**

- PALFINGER Standard PNORM 04.01.03
- ISO 11158 (HV Fluids)

PALFINGER Hydraulic Oil EXTREME meets the requirements of a wide range of industry bodies & equipment manufacturers.

#### **TECHNICAL DATA**

Properties	Unit	Method	PALFINGER Hydraulic Oil EXTREME 32
Kinematic Viscosity @ -30°C	mm²/s	ASTM D445	569
Kinematic Viscosity @ 40°C	mm²/s	ASTM D445	32
Kinematic Viscosity @ 100°C	mm²/s	ASTM D445	9.91
Viskositätsindex		ISO 2909	300
Denisity @ 15°C	kg/m <sup>3</sup>	ISO 12185	882
Flash Point (COC)	°C	ISO 2592	100
Pour Point (in °C)	°C	ISO 3016	- 60

These characteristics are typical of current production, variations in these characteristics may occur.



## COMPATIBILITY & MISCIBILITY

#### **FLUID COMPATIBILITY**

PALFINGER Hydraulic Oil EXTREME is compatible with most other mineral oil based hydraulic fluids. However, mineral oil hydraulic fluids should not be mixed with other fluid types (e.g. bio-degradable or fire-resistant fluids).

#### **SEAL & PAINT COMPATIBILITY**

PALFINGER Hydraulic Oil EXTREME is compatible with seal materials and paints normally specified for use with mineral oils.

#### HEALTH, SAFETY & ENVIRONMENT

Health and Safety Guidance on Health and Safety is available on the appropriate Safety Data Sheet. Protect the environment and take used oil to an authorized collection point. Do not discharge into drains, soil or water.

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