

## Hydraulic Oil PLUS

### FULLY SYNTHETIC BIODEGRADABLE HYDRAULIC FLUID

#### Description

**Hydraulic Oil PLUS** is a high performance, fully synthetic, zinc-free, readily biodegradable hydraulic fluid based on a mixture of saturated synthetic esters. A special additive package delivers excellent extreme pressure properties, thermal oxidation resistance, anti-wear and non-foaming control. Because of the high Viscosity Index **Hydraulic Oil PLUS** provides extremely wide operating temperature range. **Hydraulic Oil PLUS** allows for very long oil-change intervals resulting in cost effectiveness and CO<sub>2</sub> emissions reduction.

Produced in viscosity classes 15/22/32/46/68/100.

#### Industry Performance Standards

- **HEES : ISO 15380**
- **EU Ecolabel** licence no. CZ/27/001
- Environmentally Acceptable Lubricants (EALs) **US EPA Vessel General Permit 2013** (VGP)
- **MPI Approved C13** Maintenance Compound (Non-Dairy)

#### Areas of Application

**Hydraulic Oil PLUS** is specifically designed for use in all hydraulic systems, both hydrostatic and hydrodynamic. **Hydraulic Oil PLUS** is particularly recommended for operations in environmentally sensitive areas (forestry, marine, hydropower plants, earth-moving, construction, agriculture, etc.)

Before changing over to **Hydraulic Oil PLUS** please enquire for our filling instructions.

**Note:** Cleaning function of **Hydraulic Oil PLUS** may loosen any deposits in the hydraulic system.

#### Characteristic features:

- Ultimate performance and anti-wear protection;
- Outstanding thermal oxidation stability;
- Extremely wide operating temperature range;
- Very long oil-change interval > reduction in CO<sub>2</sub> emissions;
- Neutral to seal materials and elastomers;
- Non-toxic, readily biodegradable according to OECD 301B and OECD 301D
- EU Ecolabel Certificate of Environmental Excellence

Ministry for Primary Industries  
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CZ/027/001

#### TYPICAL CHARACTERISTICS

PARAMETER	UNIT	TEST METHOD	PLUS ISO VG 32	PLUS ISO VG 46	PLUS ISO VG 68
Density at 15 °C	kg/m <sup>3</sup>	ISO 12185	965	921	922
Kinematic Viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	32	46	68
Kinematic Viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	6,7	9,4	14
Viscosity Index			165	187	212
Copper Strip Corrosion at 100°C/3h		ASTM D849	1a	1a	1a
Pour point	°C	ASTM D97	-35	-35	-35
Flash point, COC	°C	ASTM D92	>260	>260	>260
Biodegradability (within 28 days)	%	OECD 301B	>80	>80	>80

The above-listed data represent average values. Material Safety Data Sheet available on request.

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