

## 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/27/022
- 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;
- EU Ecolabel Certificate of Environmental Excellence

Ministry for Primary Industries  
Manatū Ahu Matua



CZ / 27 / 002

#### 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	960	912	923
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	6,5	9,2	13,5
Viscosity Index			160	190	190
Copper Strip Corrosion at 100°C/3h		ASTM D849	1a	1a	1a
Pour point	°C	ASTM D97	-40	-40	-40
Flash point, COC	°C	ASTM D92	>250	>250	>250
Biodegradability (within 21 days)	%	CEC-L-33-A-93	>90	>90	>90

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