0257I59

Geolube Hydraulic EP

ISO 68

Fully synthetic biodegradable lubricant for hydraulic systems operating even in severe working conditions.
Formulated with Ash-Less additives, it has an excellent fluency at low temperatures and excellent resistance to high temperatures.

PAKELO GEOLUBE HYDRAULIC EP ISO 68 is a fully synthetic fluid formulated with special synthetic biodegradable base stocks (not of vegetable origin) and suitable anti-wear ash-less additives to meet the most severe hydraulic applications.

PAKELO GEOLUBE HYDRAULIC EP ISO 68 provides the following properties:

- **Very High Viscosity Index** that enables minimum viscosity changes, if compared to common hydraulic lubricants, when the fluid is exposed to different operating temperatures;
- **good shear stability** this allows the product to maintain viscosities during service almost equivalent to the starting ones;
- **very low Pour Point** that enables easy start-ups at low temperatures in hydraulic systems;
- **high anti-wear properties** to increase efficiency, life of pumps and of the operating parts in the system;
- **very high thermal-oxidative stability**: also thanks to the use of synthetic base stocks, this product can be used in systems working at even high temperatures and pressures without causing any deposits and sludge;
- **high filterability** even with the presence of water, avoiding in this way filter plugging and guaranteeing longer filter life;
- **high biodegradability**;
- **antifoam properties** to avoid the presence of foam and air which reduce system efficiency due to the different compressibility ratio between lubricant and air/lubricant mix;
- **compatible/miscible** at any percentage with mineral oils (if blended performance will be reduced);
- **HEES hydraulic fluid**: its special fully synthetic base stocks allow the product to be classified as HEES "Hydraulic Oil Environmentally Synthetic Ester".

Certificate n° EMS-5813/S
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Application fields

PAKELO GEOLUBE HYDRAULIC EP ISO 68, thanks to its chemical-physical characteristics, has been specifically developed for hydraulic systems operating under all ambient and working conditions.
It transfers power with great promptness and uniformity and is suitable for lubricating both stationary and mobile hydraulic systems operating in areas where high biodegradable lubricants are requested.

PAKELO GEOLUBE HYDRAULIC EP ISO 68 satisfies a wide range of applications, in terms of types of pumps (vane, gear, piston pumps, etc.), of metals used in the working system and of resistance to severe working conditions (high temperatures, pressure, etc.) which they may face without causing stress and/or decomposition.
It is also recommended for hydraulic turbines thanks to its particular characteristics.

Its fully synthetic base stocks and its specific additive package allow to extend oil drain intervals when compared to conventional synthetic hydrocarbon lubricants.
Please follow drain intervals Constructors' recommendations to obtain maximum hydraulic system life.

Performance levels

ISO 15380 HEES (Dry ISO 4263-3), **DIN** 51524 Part 3 HVLP (Dry ISO 4263-1).

Chemical-Physical Characteristics

Geolube Hydraulic EP	Method analysis	Unit measure	Value ISO 68
Density at 15°C	ASTM D1298	kg/l	0,928
Kinematic Viscosity at 40°C	ASTM D445	cSt	68,4
Kinematic Viscosity at 100°C	ASTM D445	cSt	13,4
Viscosity Index	ASTM D2270	-	202
Demulsibility at 54°C - Oil/Water/Emulsion - (time)	ASTM D1401	ml - (min)	43/37/0 (30)
Foaming Test - Sequence I, 24°C	ASTM D892	ml / ml	0 / 0
Foaming Test - Sequence II, 94°C	ASTM D892	ml / ml	10 / 0
Foaming Test - Sequence III, 24°C after 94°C	ASTM D892	ml / ml	0 / 0
Flash Point (C.O.C)	ASTM D92	°C	> 210
Pour Point	ASTM D97	°C	< -39

The data just above refer to average values and must not be understood as guaranteed characteristics.

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