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Part of the PANOLIN concepts



PANOLIN HLP SYNTH

Hydraulic fluid – readily biodegradable, saturated synthetic esters

Environmentally Considerate Lubricant (ECL)/Environmentally Acceptable Lubricant (EAL)

Features and benefits

- Fully synthetic, high-performance, readily biodegradable, zinc-free and environmentally friendly hydraulic fluid, based on saturated synthetic esters with special additive technology
- Minimally toxic (according to OECD 201/202/203)
- CO₂ reduction due to extremely long oil-change intervals «lifetime filling» – enables higher machine efficiency
- Increases availability and reliability of your equipment due to greater power reserves
- Outstanding extreme-pressure characteristics
- Excellent cold flow characteristics (extremely low pour point)
- Prevents gumming and deposits of ageing products even under high thermal load
- Excellent oxidation resistance at high temperatures
- Great dielectric strength
- Do not mix with other readily biodegradable hydraulic fluids – please refer to our «PANOLIN Conversion and Operating Guidelines» regarding mineral oils, synthetic fluids and PANOLIN ECLs/EALs

Applications (follow manufacturer's instructions)

- For stationary and mobile hydraulic systems: e.g. earthmoving and forestry hydraulic systems, the machine industry, construction and hydroelectric engineering
- Compressors, bearing lubrication and oil circulation systems
- Marine hydraulic systems, e.g. CPP, stabilisers, steering and deck equipment

Environmental compatibility

It is decomposed by micro-organisms in water and/or soil almost without any residues.

- ASTM D-6046-98a: P_w1, T_w1, T_s1
- Biodegradability acc. to OECD 301 B: > 60%
- Japan Eco Label
- Water hazard classifications acc. to AwSV: awg (35120, 35130, 35140), WGK 1 (35150, 35160)

Specifications

ASTM D 943 (Dry TOST test) > 5 000 h
ASTM D 2070 (modified, 1 680 h)
FZG A/8.3/90: 12
ISO 15 380/HEES
Vickers V104 C

Approvals (valid manufacturer approval for the specific lubricant)

Approved by numerous manufacturers of machinery and components.
The only readily biodegradable hydraulic fluid with Bosch Rexroth RDE 90245 approval (35140, 35150).



Technical data (mean values, subject to normal tolerances)

PANOLIN HLP SYNTH	Product No.	Density g/cm ³ 15°C	Viscosity in mm ² /s		Flashpoint COC in °C	Pour point in °C	Viscosity index	Iodine No.
			40°C	100°C				
15	35120	0.925	15.6	3.9	222	< -60	151	< 6
22	35130	0.916	20.5	4.5	220	-58	136	< 6
32	35140	0.915	33.3	6.3	240	-58	142	< 7
46	35150	0.916	46.7	8.2	240	-57	150	< 10
68	35160	0.921	68.6	11.1	240	-55	154	< 12

Instructions

Please refer to the drum label, or for detailed information, to the safety data sheet – available from PANOLIN.
Before changing over to PANOLIN ECLs/EALs, please ask for our instructions.