

PANOLIN HLP SYNTH

Bio-hydraulic fluid – saturated synthetic ester basis, environment-friendly

PANOLIN HLP SYNTH:

- fully synthetic high-performance hydraulic fluid, zinc-free and environment-friendly, on synthetic ester basis with special additives
- prevents gumming and deposits of ageing products, even at high temperatures
- extremely long oil-change interval «lifetime filling»
- reduces CO₂ emissions
- far greater reserve capacities than conventional hydraulic oils
- outstanding high-pressure characteristics
- excellent cold flow characteristics (extremely low pour point)
- oxidation-resistant at high temperatures

Application/new filling (follow manufacturer's instructions)

- for earthmoving and forestry hydraulic systems, the machine industry, construction and hydroelectric engineering
- compressors, bearing lubrication and oil circulation systems
- before changing over to PANOLIN HLP SYNTH, please ask for our filling instructions

Note: PANOLIN HLP SYNTH may loosen any deposits in the hydraulic system.

Environmental compatibility (average values – biological data subject to natural fluctuations)

PANOLIN HLP SYNTH 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: ≈ 70 %
- CO₂ reduction thanks to longer oil-change intervals
- Eco Labels from: Croatia, Czech Republic, Germany, Japan, Korea, Sweden
- Water hazard classifications/VwVwS; nwg (35020 – 35040), WGK-1 (35050 – 35070)

Specifications

ASTM D 943 (Dry TOST test) > 3'000 h
ASTM D 2070 (modified, 1'680 h)
FZG Test A/8.3/90 loading stage 12
ISO 15'380/HEES
ÖNORM C 2'027, Part 5
VDMA 24'568 HEES (synthetic esters insoluble in water)
Vickers 35 VQ-25, V104 C

Approvals

Approved by numerous manufacturers of machinery and components.



High bio-degradability



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	35020	0.922	16.4	4.0	220	-60	146	< 6
22	35030	0.920	21.8	4.7	220	-58	141	< 6
32	35040	0.918	30.6	5.9	240	-58	140	< 7
46	35050	0.918	47.0	8.1	240	-57	146	< 10
68	35060	0.918	70.6	11.3	240	-55	153	< 12
100	35070	0.918	105.0	15.5	240	-53	156	< 15

Safety-relevant notes:

Please refer to the drum label, or for detailed information, to the safety data sheet (available from PANOLIN)