

POWEROIL HYDROL HLP PRO EXTRA PROTECTION NEXT GENERATION HYDRAULIC OILS

POWEROIL HYDROL HLP PRO are blended with unique additive technology to meet the stringent thermal stability requirements of injection molding machines and improved cleanliness level required for injection molding machines as per ISO 4406. Meet improved and latest filterability/ Pump Wear requirements as specified by injection moulding machine manufacturers/OEMs.

PERFORMANCE STANDARDS:

BIS: 10522-1983 (Reaffirmed 2019) and BIS: 11656-1986 (Reaffirmed 2018)

ISO 11158 (HM), ASTM D 6158 (HM)

DIN 51524 Part 2(HM), SAE MS1004

Vickers Eaton M-2950 S and I-286-S3

Cincinnati Milacron P-68, P-69 & P-70

Parker (Denison) HF- 0, HF-1, HF-2(HM) requirement

CHARACTERISTICS	POWEROIL HYDROL HLP PRO	
	46	68
ISO VG	46	68
Colour (ASTM)	< 0.5	< 0.5
Kinematic Viscosity @ 40°C, cSt	46.35	68.50
Viscosity Index, Min.	120	115
Flash point, COC, °C, Min.	230	230
Pour point, °C Max.	-15	-15
Rust Test (D-665)	Pass	Pass
Steel corrosion test- DIN 51585	1a	1a
FZG gear failure load stage	12th	12th
TOST, Hrs.	>6000	>6000
Cleanliness Level as per ISO 4406 (at filling line)	17/15/12	17/15/12

The above properties are typical values and do not constitute specification of the product

APPLICATION:

- Recommended for use in all types of piston, vane and gear pumps. Due to outstanding high temperature capabilities, they are especially recommended for severe applications such as plastic injection moulding, where the hydraulic oil is highly stressed.

PERFORMANCE BENEFITS:

- Excellent oxidation Stability, capable of extending the oil drain interval and hence increased oil life.
- Good Sludge and particulate control. Improved filterability and consequently less downtime.
- Improved protection of critical components with tight tolerances.
- Superior wear protection for maximum equipment life.
- Greater energy saving potential
- Excellent hydrolytic stability for improved protection and extended life of yellow metal parts of the equipment.

APPROVALS:

- Approved by Bosch Rexroth and listed on the latest BR fluid rating list RDE 90245 (Poweroil Hydrol HLP Pro 46/ HLP 68)
- Approved by Cincinnati Milacron under P69 (Poweroil Hydrol HLP Pro 68) and P70 (Poweroil Hydrol HLP Pro 46)
- Approved by Fives Cincinnati under P69 / P70 (Poweroil Hydrol HLP Pro 68 / HLP Pro 46) for use in their machinery.