



Hyspin™ HLP Range

Hydraulic Oil

Description

Castrol Hyspin™ HLP hydraulic oils (previously called Energol™ HLP) are a range of premium quality products based on ashless sulphur phosphorus additive technology. This unique additive system has many benefits over traditional zinc containing products, especially when the oils operate in moist conditions. It results in improved corrosion prevention, reduced wear and significantly better filtration performance.

Application

Hyspin HLP is primarily for use in hydraulic equipment, but is also suitable for other duties in which lubricants of high oxidation stability and lubrication performance are required.

The Hyspin HLP range of oils meet the requirements of the German DIN 51524 part 2 specification for anti-wear hydraulic oils and are classified as ISO type HM. The oils have been formulated to minimize oxidation and foaming and to ensure long machinery life by reducing wear to a minimum and preventing corrosion. The oils are compatible with the seal materials used in modern hydraulic systems.

Advantages

- Excellent filterability and no tendency to block fine filters when contaminated with water.
- High chemical stability, excellent corrosion inhibition, low foaming and seal compatibility.
- Unique ashless additive technology for premium performance.
- Very low rates of wear and therefore extended life for hydraulic components.

Typical Characteristics

Name	Method	Units	HLP 32	HLP 46	HLP 68	HLP 100	HLP 150
Density @ 15°C / 59°F	ISO 12185 / ASTM D4052	kg/m ³	874	879	884	888	885
Kinematic Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm ² /s	32.1	46.7	69.2	101	152
Kinematic Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D445	mm ² /s	5.4	6.9	8.9	11.3	14.7
Viscosity Index	ISO 2909 / ASTM D2270	-	104	104	102	98	96
Pour Point	ISO 3016 / ASTM D97	°C/°F	-24/-11	-27/-17	-24/-11	-18/0	-27/-17
Foam Sequence I - tendency / stability	ISO 6247 / ASTM D882	ml/ml	30/0	0/0	0/0	0/0	0/0
Flash Point - open cup method	ISO 2592 / ASTM D92	°C/°F	222/ 432	226/ 439	246/ 475	258/ 496	252/ 486
Water Separation @ 54°C / 129°F (40/37/3)	ISO 6614 / ASTM D1401	min	10	10	15	-	-
Water Separation @ 82°C / 180°F (40/37/3)	ISO 6614 / ASTM D1401	min	-	-	-	10	10
Air Release @ 50°C / 122°F	ISO 9120 / ASTM D3427	min	2	5	10	15	15
Rust test - distilled water (24 hrs)	ISO 7120 / ASTM D665A	Rating	Pass	Pass	Pass	Pass	Pass
FZG Gear Scuffing test - A/8.3/90	ISO 14635-1	Failure Load Stage	10	10	10	10	10

Subject to usual manufacturing tolerances.

This product was previously called Energol™ HLP Range. The name was changed in 2015.

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