



## Castrol Hyspin DSP Range

Detergent Hydraulic Oil

### Description

The Castrol Hyspin™ DSP Range are Zinc free Extreme Pressure and Antiwear hydraulic oil based on mineral oil.

### Application

For hydraulics operating under high pressures and temperatures and additional high requirements on the deterging properties.

### Advantages

- Fulfills the requirements of DIN 51 524, Teil 2 - HLP, DIN 51 517, Part 3-CLP, ISO 6743/4-L-HM and Müller Weingarten specification
- Formulated without heavy metals.
- High protection against wear under mixed friction conditions (Brugger-value > 45 N/mm<sup>2</sup> and FZG-A/8.3/90, scoring load stage > 12)
- High thermal stability.
- Reliable corrosion protection.
- Excellent oxidation stability.
- Good emulsifying and detergency properties.
- Excellent air separation capability.
- Excellent filterability.
- Good low temperature behaviour.
- General good compatibility with elastomers.
- Free of silicone.

## Typical Characteristics

Name	Method	Units	DSP 10	DSP 15	DSP 22	DSP 32	DSP 46	DSP 68
ISO Viscosity Grade	-	-	10	15	22	32	46	68
Density @ 15°C / 59°F	ISO 12185 / ASTM D4052	kg/m <sup>3</sup>	850	850	870	870	880	880
Kinematic Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	10	15	22	32	46	68
Kinematic Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	2.6	3.2	4.3	5.4	6.8	8.7
Viscosity Index	ISO 2909 / ASTM D2270	-	-	-	100	102	102	100
Flash Point - open cup method	ISO 2592 / ASTM D92	°C/°F	150/302	175/347	205/401	215/419	240/464	245/473
Pour Point	ISO 3016 / ASTM D97	°C/°F	-36/-33	-33/ 27	-33/-27	-30/-22	-30/-22	-30/-22
Air Release @ 50°C / 122°F	ISO 9120 / ASTM D3427	min	3	3	4	5	6	9
Foam Sequence I - tendency / stability	ISO 6247 / ASTM D892	ml/ml	50/0	50/0	50/0	50/0	50/0	50/0
Rust test - synthetic seawater (24 hrs)	ISO 7120 / ASTM D665B	-	Pass	Pass	Pass	Pass	Pass	Pass

Subject to usual manufacturing tolerances.

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