

**Product Data Sheet** 

# **Hyspin AWH Superclean Range**

Anti-wear hydraulic oil with Viscosity Index improver

### **Description**

The Castrol Hyspin™ AWH Superclean hydraulic oil range with Viscosity Index improver (VI) is based upon highly refined mineral oil enhanced with a stabilised zinc additive system and filtered to ISO class - /14/11.

#### **Application**

Hyspin AWH Superclean has been specially formulated to provide good anti-wear and thermal stability performance. The careful blend of additives with a high quality base stock ensures that Hyspin AWH Superclean has excellent hydrolytic and oxidative stability while exhibiting a minimal tendency to produce sludge and deposits. In addition, Hyspin AWH Superclean provides corrosion protection to ferrous and yellow metal components found within a hydraulic system.

This range is designed for use in industrial hydraulic systems which require anti-wear protection. It meets the needs of hydraulic equipment operating under severe service conditions such as a wider temperature and high pressure applications.

The Hyspin AWH Superclean range is fully compatible with elastomer materials commonly used for static and dynamic seals, such as nitrile, silicone and fluorinated (e.g. Viton) polymers.

Hyspin AWH Superclean is classified as follows: ISO 6743/4 - Hydraulic Oils Type HV

Hyspin AWH Superclean grades meet the requirements (for appropriate viscosity grade) of: DIN 51524 Part 3

#### Advantages

- Good thermal and oxidative stability leads to longer operating life, reduction in lubricant costs and minimises deposit formation giving a cleaner system.
- Excellent anti-wear performance gives wear protection and reduces downtime from unscheduled maintenance.
- Good filterability characteristics (including in the presence of water) enables cost savings to be made from increased filter life and reduced maintenance.
- Excellent water separation and hydrolytic stability means reduced down time through prolonged lubricant life and increased equipment reliability.
- High Viscosity Index. Minimum change in viscosity over wide temperature range.
- Proven additive system. Ensures maximum protection from wear, corrosion, foaming and oxidation.
- Increases the service life of hydraulic systems.

## **Typical Characteristics**

Name	Method	Units	46	68
Density @ 15°C	ISO 12185 / ASTM D4052	kg/m³	876	887
Kinematic Viscosity @ 40°C	ISO 3104 / ASTM D445	mm²/s	46	68
Kinematic Viscosity @ 100°C	ISO 3104 / ASTM D445	mm²/s	8.19	11.1
Viscosity Index	ISO 2909 / ASTM D2270	-	150	150
Aniline Point	ISO 2977 / ASTM D611	°C	102	102
Water Separation @ 54°C (40/37/3)	ISO 6614 / ASTM D1401	min	15	15
Rust test - distilled water (24 hrs)	ISO 7120 / ASTM D665A	Rating	Pass	Pass
Rust test - synthetic seawater (24 hrs)	ISO 7120 / ASTM D665B	Rating	Pass	Pass
Oxidation stability - Hours to 2.0 mgKOH/g	ASTM D4310	hrs	2500+	2500+
Pour Point	ISO 3016 / ASTM D97	°C	-34	-38
Flash Point - open cup method	ISO 2592 / ASTM D92	°C	216	226
Flash Point - closed cup method	ISO 2719 / ASTM D93	°C	204	218
Fire Point	ISO 2592 / ASTM D92	°C	232	246
Air Release @ 50°C	ISO 9120 / ASTM D3427	min	12	15
Fluid Cleanliness*	ISO 4406	-	- /14/11	- /14/11

Subject to usual manufacturing tolerances. \* Fluid Cleanliness results are at point of fill.

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