



## Castrol Hyspin AWS 46

### Description

The Castrol Hyspin AWS hydraulic oil range is based upon highly refined mineral oil with a low zinc containing anti-wear system.

### Application

Hyspin AWS has been specially formulated to provide good anti-wear and thermal stability performance using the very latest additive technology. The careful blend of additives with a high quality base stock ensures that Hyspin AWS has excellent hydrolytic and oxidative stability while exhibiting a minimal tendency to produce sludge and deposits. In addition, Hyspin AWS 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 is also suitable for other duties in which lubricants of high oxidation stability and lubrication performance are required, such as lightly loaded gears, variable speed units and bearings.

The Hyspin AWS 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 AWS is classified as follows:  
DIN 51502 classification - HLP  
ISO 6743/4 - Hydraulic Oils Type HM

Hyspin AWS grades meet the requirements (for appropriate viscosity grade) of:  
DIN 51524 Part 2  
Cincinnati Lamb (Milacron) P 68-69-70  
Denison (Parker Hannafin) HF-0  
US Steel 126 & 127  
Eaton (formerly Vickers) I-286-S & M-2950-S  
Bosch Rexroth RE90220

### 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.

## Typical Physical Characteristics

TEST	AWS 10	AWS 15	AWS 22	AWS 32	AWS 46	AWS 68	AWS 100	AWS 150
Kinematic Viscosity								
@ 40°C, cSt	10	15	22	32	46	68	100	150
@ 100°, cSt	2.55	3.2	4.25	5.3	6.65	8.6	11.1	14.5
Viscosity Index	75	75	102	102	102	102	97	97
Relative Density @ 20°C	0.875	0.88	0.865	0.87	0.875	0.88	0.88	0.885
Acidity, mgKOH/g	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Air Release Value @ 50°C	4	4	4	4	8	8	12	18
Pour Point, °C	-39	-39	-30	-30	-21	-21	-21	-21
Closed Flash Point, °C	160	160	170	200	220	220	220	220
Foam sequence 1, mins	30/0	30/0	30/0	30/0	30/0	30/0	30/0	-
Demulsification (D1401) mins	10	10	10	10	15	15	20	-
4-Ball 1hr Wear @ 30kg, 1640 rpm, mm			0.4	0.4	0.4	0.4	0.4	0.4
FZG (A/8.3/90) Fail Stage	11	11	11	11	12	12	12	12
Vickers HP Vane Pump Test				25	25	25		

## Additional Information

**Seal Compatibility:** Suitable for use with Nitrile, Buna-N, Viton and Silicone seal materials.

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Health and Safety information sheets are available for all Castrol products from the address below:

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