Product Data Sheet



Hyspin AWS

Anti-wear Hydraulic Oil

Description

The Castrol Hyspin AWSTM hydraulic oil range of premium lubricants are based upon severely hydro treated premium mineral base stocks (group II based oil) enhanced with a stabilised zinc additive system.

Applications

Hyspin AWS has been specially formulated to provide outstanding anti-wear and thermal stability performance using proven 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, some variable speed units and bearings.

The Hyspin AWS range is compatible with the most commonly used nitrile, silicone and fluropolymer seal materials.

Hyspin AWS is classified as follows:

- DIN 51502 classification HLP and ISO 6743/4 Hydraulic Oil 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 (formally Vickers) I-286-S & M-2950-S
 - MB Approval 341

Advantages

Hyspin AWS has the following advantages when compared to conventional hydraulic oils:

- Good thermal and oxidative stability. Oxidative stability reduces deposit formation, resulting in a cleaner system. This can extend the machinery's operating life.
- Excellent anti-wear performance increases wear protection, which can help reduce downtime caused by 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, measured by industry standard testing. This increases equipment reliability, helping to prolong the lubricant's life and reduce downtime

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Typical Characteristics

Test	Method	Units	10	22	32	46	68	100	150
Density @ 15°C	ASTM D4052	g/ml	0.870	0.863	0.857	0.863	0.881	0.877	0.887
K.V. @ 40°C	ASTM D445	mm2/s	10	22	31.42	46.35	67.29	100	150
K.V. @ 100°C	ASTM D445	mm2/s	2.55	4.25	5.55	7.05	8.79	11.1	14.5
Viscosity Index	ASTM 2270	-	-	100	115	110	103	99	98
Pour Point	ASTM D97	°C	-36	-27	-27	-24	-21	-18	-18
Flash Point, PMCC	ASTM D93	°C	154	205	210	215	225	225	230
Foam Sequence I	ASTM D892	ml/ml	10/0	10/0	10/0	10/0	10/0	10/0	10/0
Demulsification @ 54°C	ASTM D1401	min	5	10	15	15	15	-	-
Demulsification @ 82°C	ASTM D1401	min	-	-	-	-	-	15	20
Air Release @ 50°C	ASTM D3427	min	1	1	3	2.5	8	15.8	15.2
FZG (A8.3/90), fail stage	DIN 51354	-	-	-	11	12	12	12	12
Rust Test (24 hrs synthetic sea water)	ASTM D665B	-	Pass						
Cooper corrosion (1hours, @100°C)	ASTM D130		1A						

The above figures are typical of those obtained with normal production tolerance and do not constitute a specification.

Storage

All packages should be stored under cover. Where outside storage is unavoidable drums should be laid horizontally to avoid the possible ingress of water and the obliteration of drum markings.

Products should not be stored above 60°C, exposed to hot sun or freezing conditions.

Castrol Hyspin AWS

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