

Castrol Hyspin AWS Range

Anti-wear hydraulic oil

Description

Castrol Hyspin AWS™ hydraulic oil range is based upon highly refined mineral oil enhanced with a stabilised zinc additive system.

Application

Hyspin AWS has been specially formulated to provide good 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 such as lightly loaded gears, 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 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

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.

Typical Characteristics

Name	Method	Units	AWS 10	AWS 15	AWS 22	AWS 32	AWS 46	AWS 68	AWS 100	AWS 150	AWS 220
ISO Viscosity Grade	-	-	10	15	22	32	46	68	100	150	220
Density @ 15°C / 59°F	ISO 12185 / ASTM D4052	kg/m ³	890	870	870	880	880	880	890	890	890
Kinematic Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm ² /s	10	15	22	32	46	68	100	150	220
Kinematic Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D445	mm ² /s	2.4	3.2	4.3	5.3	6.7	8.6	11.1	14.5	18.7
Viscosity Index	ISO 2909 / ASTM D2270	-	-	-	>95	>95	>95	>95	>95	>95	>95
Pour Point	ISO 3016 / ASTM D97	°C/°F	-36/ -33	-33/ -27	-27/ -17	-27/ -17	-24/ -11	-21/ -6	-18/ 0	-15/ 5	-12/ 10
Foam Sequence I - tendency / stability	ISO 6247 / ASTM D892	ml/ml	10/0	10/0	10/0	10/0	10/0	10/0	10/0	10/0	10/0
Flash Point - open cup method	ISO 2592 / ASTM D92	°C/°F	170/ 338	195/ 383	205/ 401	210/ 410	215/ 419	225/ 437	225/ 437	230/ 446	255/ 491
Flash Point - closed cup method	ISO 2719 / ASTM D93	°C/°F	145/ 293	160/ 320	170/ 338	200/ 392	200/ 392	220/ 428	220/ 428	220/ 428	230/ 446
Water Separation @ 54°C / 129°F (40/37/3)	ISO 6614 / ASTM D1401	min	5	10	10	15	15	15	-	-	-
Water Separation @ 82°C / 180°F (40/37/3)	ISO 6614 / ASTM D1401	min	-	-	-	-	-	-	15	20	20
Air Release @ 50°C / 122°F	ISO 9120 / ASTM D3427	min	4	4	4	4	8	8	12	18	29
FZG Gear Scuffing test - A/8.3/90	ISO 14635-1	Failure Load Stage	-	-	-	11	12	12	12	12	12
Rust test - distilled water (24 hrs)	ISO 7120 / ASTM D665A	-	Pass								
Rust test - synthetic seawater (24 hrs)	ISO 7120 / ASTM D665B	-	Pass								

Subject to usual manufacturing tolerances.

Castrol Hyspin AWS Range

04 Jun 2018

Castrol, the Castrol logo and related marks are trademarks of Castrol Limited, used under licence.

This data sheet and the information it contains is believed to be accurate as of the date of printing. However, no warranty or representation, express or implied, is made as to its accuracy or completeness. Data provided is based on standard tests under laboratory conditions and is given as a guide only. Users are advised to ensure that they refer to the latest version of this data sheet. It is the responsibility of the user to evaluate and use products safely, to assess suitability for the intended application and to comply with all applicable laws and regulations. Material Safety Data Sheets are available for all our products and should be consulted for appropriate information regarding storage, safe handling, and disposal of the product. No responsibility is taken by either BP plc or its subsidiaries for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from hazards inherent in the nature of the material. All products, services and information supplied are provided under our standard conditions of sale. You should consult our local representative if you require any further information.

Australia Level 8 (QV1 Building), 250 St. Georges Terrace, Perth WA 6000, Australia. Customer Service Number +61 (0)8 9420 1825

Dubai City Tower 2, 6th Floor PO BOX 1699, Sheikh Zayed Road, Dubai, U.A.E. Customer Service Number +971 4 3079304

Norway Drammensveien 167, Box 153 Skoyen, 0212 Oslo, Norway. Customer Service Number +47 22 51 12 43 501

Singapore Keppel Bay Towers, 1 Harbourfront Avenue 02-01, Singapore 098632, Singapore. Customer Service Number +65 6371 8478

United Kingdom BlueSky Business Space, Westpoint House, Pavilion 2 Prospect Park, Prospect Road, Arnhall Business Park, Westhill. AB32 6FJ, UK. Customer Service Number +44 (0)1224 270365

USA 501 Westlake Park Boulevard, Houston, Texas 77079, USA. Customer Service Number +1 800 339-7157., Brazil Avenida Itaoca, 2.400, Inhauma, Rio de Janeiro, Zip code 21061-020, customer service +55 11 4133 7835

www.castrol.com/globalbusiness