

Hyspin AWH-M

High VI Hydraulic Oil

Description

The Castrol Hyspin AWH-M hydraulic oil range of premium high viscosity index lubricants is based on the latest stabilised zinc additive technology.

Applications

Hyspin AWH-M contains a shear stable VI improver which helps maintain the viscosity characteristics of the product over a wide temperature range even during prolonged use. The VI Improver also imparts a very low pour point which enables the product to be used in very cold environments. Hyspin AWH-M exhibits excellent corrosion and wear protection as well as outstanding thermal and oxidative stability.

In addition, Hyspin AWH-M has excellent hydrolytic stability and separates rapidly from water contamination upon standing.

These grades are intended for two main types of duty :

- Outdoor plant likely to operate in wide ranges of temperature - such as machinery subjected to cold start up conditions and high temperature continuous running. Examples include off-highway and marine applications.
- Indoor manufacturing equipment that incorporates control systems requiring a hydraulic fluid whose viscosity change with temperature is minimal. Examples include precision machine tools.

Hyspin AWH-M range is fully compatible with the elastomers materials commonly used for static and dynamic seals, such as nitrile, silicone and fluropolymers.

Hyspin AWH-M is classified as follows:

- DIN classification – HVLP
- ISO 6743/4 - Hydraulic Oils Type HV
- Hyspin AWH-M grades meet the requirements of:
- DIN 51524 Part 3
- Cincinnati Milacron (P 68-69-70)
- Denison HF-0 & HF-2
- US Steel 126 & 127
- Eaton (formally Vickers) I-286-S & M-2950-S

Advantages

- High viscosity index and low pour point enables the product to be used over a wide temperature range
- Good shear stability means no excessive loss in viscosity due to mechanical shearing.
- Excellent antiwear performance provides extended wear protection for hydraulic pumps. Reduced down time due to unscheduled maintenance and savings from reduced replacement part costs.
- Low deposit formation and longer oil life provides an overall reduction in lubricant costs and used oil disposal costs.
- Excellent water separation and hydrolytic stability means reduced down time through prolonged lubricant life and increased equipment reliability.
- Good filterability gives a cleaner system with less frequent filter changes.

Typical Characteristics

	Method	Units	15	32	46	68	100	150
Density @ 15°C	ASTM D4052	g/ml	0.88	0.87	0.88	0.88	0.88	0.89
K.V. @ 40°C	ASTM D445	cSt	15	32	46	68	100	150
K.V. @ 100°C	ASTM D445	cSt	3.8	6.2	8.1	10.8	13.2	17.7
Viscosity Index	ASTM 2270	-	> 150	> 150	> 150	> 140	> 130	> 130
Pour Point	ASTM D97	°C	-48	-39	-36	-36	-33	-30
Flash Point, PMC	ASTM D93	°C	160	200	220	220	220	220
Foam Sequence I	ASTM D892	ml/ml	20/0	20/0	20/0	20/0	20/0	20/0
Demulsification @ 54°C	ASTM D1401	min	5	10	15	15	-	-
Demulsification @ 82°C	ASTM D1401	min	-	-	-	-	20	20
Air Release @ 50°C	ASTM D3427	min	4	4	8	8	12	24
FZG (A8.3/90), fail stage	DIN 51354	-	-	11	12	12	12	12
Rust Test (24 hrs synthetic sea water)	ASTM D665B	-	Pass	Pass	Pass	Pass	Pass	Pass
K.V. @ 100°C after 4 hours KRL	DIN 51350 T6	% loss	-	-	9.5	-	-	-

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.

Health, Safety and Environment

Health, safety and environmental information is provided for this product in the Materials Safety Data Sheet. This gives details of potential hazards, precautions and First Aid measures, together with environmental effects and disposal of used products.

Castrol International will not accept liability if the product is used other than in the manner or with the precautions or for the purpose/s specified. Before the product is used other than as directed, advice should be obtained from the local Castrol office.