



Lube Control Pty Ltd



Product Data Sheet

Hyspin HVI 46 Superclean

High Viscosity Index anti-wear Hydraulic oil

Description

Castrol Hyspin™ HVI 46 Superclean, a high viscosity index (VI) oil, is based on a carefully selected ashless (zinc free) additive system designed to meet and exceed the most exacting performance standards. Filtered to ISO 4406 - 16/14/11 (equivalent to NAS 5), to ensure high cleanliness after storage and delivery.

Application

Hyspin HVI 46 Superclean is intended for severely stressed hydraulic systems requiring a high level of anti-wear performance and fine filtration. In addition, Hyspin HVI exhibits excellent corrosion protection as well as outstanding thermal and oxidative stability. Hyspin HVI has excellent hydrolytic stability and separates rapidly from water contamination. Hyspin HVI contains a shear stable additive system which helps to maintain the viscosity characteristics of the product over a wide temperature range, even during prolonged use, and imparts a very low pour point which enables the product to be used in cold environments. The Hyspin HVI range is fully compatible with elastomer materials commonly used for static and dynamic seals, such as nitrile, silicone and fluorinated (e.g. Viton) polymers.

Applications include:

- Outdoor equipment which are likely to operate over wide temperature ranges, 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 minimal viscosity change with temperature. Examples include precision machine tools.

Hyspin HVI is classified as follows:

DIN 51502 classification - HVLP

ISO 6743/4 - Hydraulic Oils Type HV

Hyspin HVI 46 meets the requirements of:

DIN 51524 Part 3

Cincinnati Lamb (Milacron) P 68-69-70

Denison (Parker Hannafin) HF-0

US Steel 126 & 127

Eaton I-286-S & M-2950-S

Frank Mohn

Castrol Hyspin HVI 46 Superclean is suitable for use in Hitachi Hydraulic Excavators that require an ISO 46 anti-wear type hydraulic oil



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 anti-wear performance provides extended wear protection for hydraulic pumps. Reduced down time due to unscheduled maintenance and savings from replacement part costs.
- Excellent water separation and hydrolytic stability means reduced down time through prolonged lubricant life and increased equipment reliability.
- Excellent thermal and oxidative stability provides reliable performance and extended oil life in severe applications. Minimal deposit formation gives a cleaner system and reduced frequency of filter changes.
- Excellent filterability characteristics (including in the presence of water) enables cost savings to be made due to increased filter life.

Typical Characteristics

Name	Method	Units	HVI 46
ISO Viscosity Grade	-	-	46
Density @ 15°C	ISO 12185 / ASTM D4052	kg/m³	880
Kinematic Viscosity @ 40°C	ISO 3104 / ASTM D445	mm²/s	46
Kinematic Viscosity @ 100°C	ISO 3104 / ASTM D445	mm²/s	8.1
Viscosity Index	ISO 2909 / ASTM 2270	-	>150
Pour Point	ISO 3016 / ASTM D97	°C	-36
Flash Point - closed cup method	ISO 2719 / ASTM D93	°C	220
Foam Sequence I - tendency / stability	ISO 6247 / ASTM D892	ml/ml	20/0
Water Separation @ 54°C (40/37/3)	ISO 6614 / ASTM D1401	mins	15
Air Release @ 50°C	ISO 9120 / ASTM D3427	mins	8
FZG Gear Scuffing test - A/8.3/90	ISO 14635-1	Failure Load Stage	12
Rust test - distilled water (24 hrs)	ISO 7210 / ASTM D665A	Rating	Pass
Rust test - synthetic seawater (24 hrs)	ISO 7210 / ASTM D665B	Rating	Pass
Shear Stability - KRL test (4hrs)	DIN 51350-6	viscosity loss (%)	9.5
Cleanliness Class (at the filling point)	ISO 4406	scale-No	16/14/11

Subject to usual manufacturing tolerances.

Hyspin HVI 46 Superclean
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