Product Data

Bartran HV

High viscosity index antiwear hydraulic oils

Description

The BP Bartran™ HV range of high viscosity index (VI) lubricants are based on a carefully selected ashless additive system designed to meet and exceed the most exacting performance standards.

Application

Bartran HV oils are intended for severely stressed hydraulic systems requiring a high level of antiwear performance and fine filtration. In addition, Bartran HV exhibits excellent corrosion protection as well as outstanding thermal and oxidative stability. Bartran HV has excellent hydrolytic stability and separates rapidly from water contamination. The selection of a shear stable VI Improver ensures that there is no excessive loss in viscosity due to mechanical shearing. The VI Improver also imparts a very low pour point which enables the product to be used in very cold environments. 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.

The Bartran HV range is fully compatible with elastomer materials commonly used for static and dynamic seals, such as nitrile, silicone and fluorinated (e.g. Viton) polymers.

- Bartran HV is classified as follows:
- DIN classification – HVLP
- ISO 6743/4 – Hydraulic Oils Type HV
- Bartran HV grades meet the requirements (for appropriate viscosity grade) of:
- DIN 51524 Part 3
- 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
- Frank Mohn

Advantages

- High viscosity index and low pour point enables the product to be used over a wide temperature range, with 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.
- 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.

- Good filterability characteristics in both wet and dry conditions enables cost savings to be made due to increased filter life.

Typical Characteristics

Name	Method	Units	Bartran HV 15	Bartran HV 22	Bartran HV 32	Bartran HV 46	Bartran HV 68	Bartran HV 100	Bartran HV 150
Density @ 15C, Relative	ASTM D1298	Kg/l	0.884	0.88	0.874	0.873	0.881	0.886	0.889
Flash Point	ASTM D92	°C	140		200	200	204	206	208
Kin Viscosity @ 40°C	ASTM D445	cSt	14.77	22	32.39	45.61	68.93	101.0	149.3
Kin Viscosity @ 100°C	ASTM D445	cSt	3.79	-	6.43	8.15	10.67	13.64	17.49
Viscosity Index	ASTM D2270		155		155	154	144	135	128
Pour Point	ASTM D97	°C	-48	-	-45	-30	-30	-33	-30
Neutralization Value	ASTM D664	mgKOH/g	0.23	-	0.22	0.22	0.23	0.22	0.22
FZG-Test (A/8.3/90)	IP 334	Stage	-	-	12	12	12	12	12
	ASTM D892	passed							
Foam Tendency / Stability									
Seq. 1		ml/ml	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Seq. 11			0/0	0/0	0/0	0/0	0/0	0/0	0/0
Seq. 111			0/0	0/0	0/0	0/0	0/0	0/0	0/0

Subject to usual manufacturing tolerances.

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 damage to drum markings. Products should not be stored above 60°C, exposed to hot sun or freezing condition

BP, the BP logo and related marks are trademarks of BP p.l.c., 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.

10 Junction Avenue , Parktown , Johannesburg , 2193 , South Africa
+27 11 488 5111, 0860 222 166 (SA), 0800 111 551 (SA)
www.castrol.co.za