

#### **BP Bartran HV**

High viscosity index antiwear hydraulic oils

### **Product Data**

### **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 range of 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 fromwater 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 coldenvironments.

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 downtime 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

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## **Typical Characteristics**

Test	Method	Units	HV 15	HV 32	HV 46	HV 68	HV 100
ISO Viscosity Grade	-	-	15	32	46	68	100
Density @ 15°C	ISO 12185 / ASTM D4052	g/ml	0.88	0.88	0.88	0.88	0.89
K.V. @ 40°C	ISO 3104 / ASTM D445	mm2/s	15	32	46	68	100
K.V. @ 100°C	ISO 3104 / ASTM D 445	mm2/s	3.83	6.41	8.32	10.8	13.45
Viscosity index	ISO 2909 / ASTM 2270	-	>150	>150	>150	>140	>130
Pour Point	ISO 3016 / ASTM D97	°C	<-51	-45	-42	-36	-30
Flash Point, COC	ISO 2592 / ASTM D92	°C	205	210	215	226	226
Flash Point, PMC	ISO 2719 / ASTM D93	°C	160	200	220	220	220
Foam Seq 1	ISO 6247 / ASTM D892	mls	20/0	20/0	20/0	20/0	20/0
Water Separability @ 54°C	ISO 6614/ ASTM D1401	Mins	5	10	15	15	-
Water Separability @ 82°C	ISO 6614 / ASTM D1401	Mins	-	-	-	-	20
Air Release Value	ISO 9120 / ASTM D3427	Mins	4	4	8	8	12
FZG fail stage (A8.3/90)	ISO 14635-1 / DIN 51354	-	-	11	12	12	12
Rust Test (24 hrs Distilled water)	ISO 7210 / ASTM D665B	-	Pass	Pass	Pass	Pass	Pass
Rust Test (24 hrs Synthetic sea water)	ISO 7210 / ASTM D665B	-	Pass	Pass	Pass	Pass	Pass
K.V. @ 100°C after 4 hours KRL	DIN 51350 T6	% loss	-	-	9.5	-	-

Subject to usual manufacturing tolerances.

#### **Additional Information**

Bartran HV range of oils are classified as non hazardous according to the criteria of Safe Work Australia. For further information please refer to separate Material Safety Data Sheet available on request. It is not a Dangerous Good.

Bartran HV range of oils are classified as C2 combustible according to AS 1940 for storage and handling purposes.

Spillage: SMALL - 20 LITRES OR LESS

Soak up on Castrol Diatomaceous Earth or similar inert oil absorbent. Arrange for disposal through an

approved facility.

LARGE - GREATER THAN 20 LITRES

Contain as soon as possible, remove by best means available and arrange recycling (preferred) or disposal

through an approved facility.

Disposal: New or used material must not be allowed to enter the ground, ground water, water courses, sewers or

drainage systems. Advice may be sought from the Environmental Protection Authority or from the local waste

disposal authority

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