



Bartran

Premium Hydraulic Oil

Description; Description

A range of premium quality mineral oil-based hydraulic fluids containing zinc-free anti-wear additives.

Bartran oils display high performance characteristics with outstanding ultra fine filterability.

Applications; Applications

Bartran oils are formulated for severely stressed hydraulic systems in which high levels of anti-wear performance and/or ultra fine filtration are required. Examples include modern electro-hydraulic control valves incorporating 0.5 (nominal) micron filters. The Bartran range is fully compatible with the elastomer materials commonly used for static and dynamic seals, such as :

- . Nitril butyl (PERBUNAN* or BUNA N*)
- . Fluorinated (VITON*/TEFLON*)
- . Perfluorinated (KABREZ*)
- . Polyurethane (ADIPRENE*)
- . Polyester (HYTREL*) * trade marks

Bartran oils are suitable for a wide range of other applications requiring high levels of anti-wear and anti-oxidation performance e.g. bearings and gears of high speed air/gas blowers.

BP's Bartran oils meet specification requirements of all the major manufacturers of hydraulic pumps and motors, and the following approvals/recommendations apply :

- DIN 51 524, Part 2
- ISO 6743/4 (NFE 48-603,NFE 60-203), Category HM
- Denison HF-0, HF-2
- Vickers industrial machinery, exceeds I-286-S specification (pump 35V.Q.25)
- Rexnord-Racine vane pumps
- Mannesmann Rexroth Hydromatik piston pumps
- Sigma-Rexroth gear pumps
- Cincinnati Milacron - p. 68-69-70
- US Steel 136

Follow the recommendations of equipment manufacturers regarding filtration and oil change intervals.

Main Benefits; Main Benefits

- Highest degree of equipment protection
- Extended oil life and improved tolerance of severe service conditions
- Versatile range for other applications thus providing scope for rationalisation.

- Superior ultra fine filterability even in wet conditions
- Leading performance in anti-wear protection, oxidation resistance and thermal stability

Storage; 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 ; All packages should be stored under cover. Where outside storage is unavoidable drums

of drum markings. Products should not be stored above 60°C, exposed to hot sun or freezing conditions.; of drum markings. Products should not be stored above 60°C, exposed to hot sun or freezing conditions.

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Health, Safety and Environment; 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.; 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.

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Typical Characteristics; Typical Characteristics

	Test Methods; Test Methods	Units; Units	Grade :; Grade :					
			22	32	46	68	100	150
Density at 15 °C	ISO 3675 ASTM D1298	kg/m ³	875	876	879	882	879	888
Flash Point (COC)	ISO 2592 ASTM D92	°C	192	216	225	240	246	267
Viscosity KV @ 40 °C	ISO 3104	mm ² /s	22	32	46	68	100	150
100 °C	ASTM D445		4.2	5.4	6.8	8.7	11.4	14.6
Viscosity Index	ISO 2909 ASTM D2270	-	90	100	100	100	100	95
Pour Point	ISO 3016 ASTM D97	°C	-30	-30	-30	-30	-30	-24
Foam Tendency/Stability :	ASTM D892 IP 146							
Sequence I : 24 °C		ml	10/0 5/0 50	50	5/0 5/0			
Sequence II : 93 °C		ml	50/0 15/0 100	10/0	10/0 5/0			
Sequence III : 24°C after		ml	60/0 5/0 50	50	5/0 5/0			
Sequence II								
Air Release Time to 0.2 % at 50 °C	ASTM D3427 IP 313	min	-	1.8	-	-	-	-
Demulsification	ISO 6614 ASTM D1401	min	5	5	10	10	10	-
Corrosion-rust protection	ISO 7210 ASTM D665B	-	pass	pass	pass	pass	pass	pass
Copper Corrosion 3h/100 °C	ISO 2160 ASTM D130	-	1b	1b	1b	1b	1b	1b
Neutralisation Value	ASTM D974	mgKOH/g	0.22	0.22	0.22	0.22	0.22	0.22
Seal Compatibility Index 24 h at 100 °C	IP 278	-	15	13	10	7	6	4
FZG gear test : A/8.3/90 °C	IP 334 DIN 51 354	stage failure	12	12	12	12	12	12

The above figures are typical of those obtained with normal production tolerance and do not constitute a specification.

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Date Created: 10/05/1993 13:13:30 Last Modified: 04/10/2005