

RENOLIN B HVI

EP lubricating and hydraulic oils with high viscosity index

Description

Proper function and operating safety of hydraulic systems are largely influenced by the quality of the hydraulic medium. In addition to the task of transferring forces, the operating fluid must seal, cool and lubricate. Since hydraulic oils are exposed to high stress due to the operating conditions, they have to fulfil a large number of requirements. The oils of the RENOLIN B HVI series are formulated on the basis of highly ageing-resistant solvates containing additives that increase the aging resistance. The products of the RENOLIN B HVI series are zinc-containing HVLP hydraulic and general lubricating oils according to DIN 51524-3. Mineral oil-based, demulsifying.

Application

RENOLIN B HVI high-quality products are used as hydraulic oil and as lubricating oil for various applications like bearings and gear boxes, even when a high viscosity index and good load carrying capacity is required. Especially recommended for applications where a low start-up viscosity at low temperatures and a higher viscosity at higher temperatures is required. Particularly suited to all applications in mobile and industrial hydraulic systems that require the use of an HVLP oil according to DIN 51524-3 with a wide service temperature range.

Advantages

- Low foaming tendency
- Good air release properties
- High ageing resistance
- Good corrosion protection
- Very good viscosity-temperature-behaviour
- Very good wear protection
- High viscosity index
- Wide service temperature range
- Good shear stability

Specifications

The products meet or exceed the requirements according to

- DIN 51524-3, HVLP
- ISO 6743-4, HV
- ISO 11158
- Denison HFO
- Bosch Rexroth
- Vickers
- US Steel
- Cincinnati Milacron

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Typical data:

Product name		15	32	46	
Properties	Unit				Test method
ISO VG		15	32	46	DIN 51519
Kinematic viscosity					
at - 20 °C	mm ² /s	400	1858	3486	DIN EN ISO 3104
at 0 °C	mm ² /s	80.5	233.4	401.6	
at 40 °C	mm ² /s	15	32	46	
at 100 °C	mm ² /s	3.8	6.3	8.1	
Viscosity index	-	151	152	150	DIN ISO 2909
Density at 15 °C	kg/m ³	859	871	879	DIN 51757
Flashpoint (Cleveland Open Cup)	°C	180	178	186	DIN ISO 2592
Pourpoint	°C	- 45	- 48	- 45	DIN ISO 3016
Neutralisation number	mgKOH/g	0.5	0.5	0.5	DIN 51558-2
Mechanical testing in the FZG gear test rig, A/8.3/90	failure load stage	11	11	11	DIN ISO 14635-1
Brugger test – wear protection	N/mm ²	30	30	30	DIN 51347-2
VKA shear stability, four-ball test: relative shear loss (viscosity reduction, V ₄₀ and V ₁₀₀) after 20 h	%	< 15	< 15	< 15	DIN 51350-6

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Typical technical data:

Product name		68	100	150	
Properties	Unit				Test method
ISO VG		68	100	150	DIN 51519
Kinematic viscosity					
at - 20 °C	mm ² /s	-	-	-	DIN EN ISO 3104
at 0 °C	mm ² /s	618.9	-	-	
at 40 °C	mm ² /s	68	100	150	
at 100 °C	mm ² /s	11.0	13.5	17.7	
Viscosity index	-	153	140	130	DIN ISO 2909
Density at 15 °C	kg/m ³	868	871	881	DIN 51757
Flashpoint (Cleveland Open Cup)	°C	240	240	260	DIN ISO 2592
Pourpoint	°C	- 36	- 24	- 24	DIN ISO 3016
Neutralisation number	mgKOH/g	0.5	0.5	0.5	DIN 51558-2
Mechanical testing in the FZG gear test rig, A/8.3/90	failure load stage	11	11	11	DIN ISO 14635-1
Brugger test – wear protection	N/mm ²	30	30	30	DIN 51347-2
VKA shear stability, four-ball test: relative shear loss (viscosity reduction, V ₄₀ and V ₁₀₀) after 20 h	%	< 15	< 20	< 20	DIN 51350-6

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We therefore recommend that you consult a FUCHS SCHMIERSTOFFE GMBH application engineer to discuss application conditions and the performance criteria of the products before the product is used. It is the responsibility of the user to test the functional suitability of the product and to use it with the corresponding care.

Our products undergo continuous improvement. We therefore retain the right to change our product program, the products, and their manufacturing processes as well as all details of our product information sheets at any time and without warning, unless otherwise provided in customer-specific agreements. With the publication of this product information, all previous editions cease to be valid.

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