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 51 524-3. 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 51 524-3 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 51 524-3, HVLP
- ISO 6743-4, HV
- Denison HF0
- Bosch Rexroth
- Vickers
- US Steel
- Cincinnati Milacron

FUCHS EUROPE SCHMIERSTOFFE GMBH
Friesenheimer Straße 15
68169 Mannheim/Germany

Telefon: +49 621 3701-0
Telefax: +49 621 3701-570
E-Mail: zentrale@fuchs-europe.de

RENOLIN B HVI

EP Lubricating and Hydraulic Oils with High Viscosity Index

Typical data:

Product name		**15**	**22**	**32**	**46**	
Properties	**Unit**					**Test method**
ISO VG		15	22	32	46	DIN 51 519
Kinematic viscosity at –20°C at 0°C at 40°C at 100°C	 mm²/s mm²/s mm²/s mm²/s	 400 80.5 15 3.8	 550 134 22 4.95	 1858 233.4 32 6.3	 3486 401.6 46 8.1	DIN EN ISO 3104
Viscosity index	-	151	156	152	149	DIN ISO 2909
Density at 15°C	kg/m³	859	866	871	879	DIN 51 757
Colour	ASTM	1.0	1.0	1.0	0.5	DIN ISO 2049
Flashpoint (Cleveland Open Cup)	°C	180	175	178	186	DIN ISO 2592
Pourpoint	°C	-45	-45	-48	-45	DIN ISO 3016
Neutralisation number	mgKOH/g	0.5	0.5	0.5	0.5	DIN 51 558-2
Mechanical testing in the FZG gear test rig, A/8,3/90	failure load stage	11	11	11	11	DIN ISO 14635-1
Brugger test – wear protection	N/mm^2	30	30	30	30	DIN 51 347-2
VKA shear stability, four-ball test: relative shear loss (viscosity reduction, V_{40} and V_{100}) after 20h	%	< 20	< 20	< 20	< 20	DIN 51 350-6

FUCHS EUROPE SCHMIERSTOFFE GMBH
Friesenheimer Straße 15
68169 Mannheim/Germany

Telefon: +49 621 3701-0
Telefax: +49 621 3701-570
E-Mail: zentrale@fuchs-europe.de

RENOLIN B HVI

EP Lubricating and Hydraulic Oils with High Viscosity Index

Typical data:

Product name		**68**	**100**	**150**	
Properties	**Unit**				**Test method**
ISO VG		68	100	150	DIN 51 519
Kinematic viscosity at –20°C at 0°C at 40°C at 100°C	 mm²/s mm²/s mm²/s mm²/s	 - 618.9 68 11.0	 - - 100 13.5	 - - 150 17.7	DIN EN ISO 3104
Viscosity index	-	153	140	130	DIN ISO 2909
Density at 15°C	kg/m³	868	871	881	DIN 51 757
Colour	ASTM	1.0	2.5	3.0	DIN ISO 2049
Flashpoint (Cleveland Open Cup)	°C	240	240	260	DIN ISO 2592
Pourpoint	°C	-33	-24	-24	DIN ISO 3016
Neutralisation number	mgKOH/g	0.5	0.5	0.5	DIN 51 558-2
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 51 347-2
VKA shear stability, four-ball test: relative shear loss (viscosity reduction, V_{40} and V_{100}) after 20h	%	< 20	< 20	< 20	DIN 51 350-6

FUCHS EUROPE SCHMIERSTOFFE GMBH
Friesenheimer Straße 15
68169 Mannheim/Germany

Telefon: +49 621 3701-0
Telefax: +49 621 3701-570
E-Mail: zentrale@fuchs-europe.de

RENOLIN B HVI

EP Lubricating and Hydraulic Oils with High Viscosity Index

The information contained in this product information is based on the experience and know-how of FUCHS EUROPE SCHMIERSTOFFE GMBH in the development and manufacturing of lubricants and represents the current state-of-the-art. The performance of our products can be influenced by a series of factors, especially the specific use, the method of application, the operational environment, component pre-treatment, possible external contamination, etc. For this reason, universally-valid statements about the function of our products are not possible. The information given in this product information represents general, non-binding guidelines. No warranty expressed or implied is given concerning the properties of the product or its suitability for any given application.

We therefore recommend that you consult a FUCHS EUROPE 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. With the publication of this product information, all previous editions cease to be valid.

Any form of reproduction requires express prior written permission from FUCHS EUROPE SCHMIERSTOFFE GMBH.

FUCHS EUROPE SCHMIERSTOFFE GMBH
Friesenheimer Straße 15
68169 Mannheim/Germany

Telefon: +49 621 3701-0
Telefax: +49 621 3701-570
E-Mail: zentrale@fuchs-europe.de