

RENOLIN MWB

Zinc- and ash-free hydraulic oils HLPD

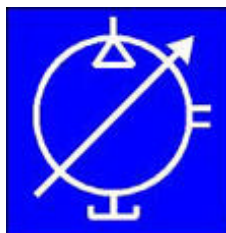
Description

Ever increasing demands, e.g. regarding precision, speed, etc., are made on today's machinery, which causes machine components and component materials to work near to their maximum capacity. Often, this leads to increased wear and machine breakdowns.

The RENOLIN MWB oils are high-performance hydraulic and lubricating oils which were developed to ensure optimum efficiency and reliability of machinery and systems. These oils are based on high-quality base oils and special, zinc- and ash-free additive components which offer excellent wear protection, especially under mixed friction conditions (high Brugger value). The detergent / dispersant properties of the RENOLIN MWB oils prevent the formation of residues and ensure that contaminants (dirt, water) are kept in suspension. Surface wetting is improved and the formation of a protective lubrication film is guaranteed, even under hard working conditions.

Advantages / Benefits

- **Zinc- and ash-free**
- **Powerful EP properties and very good wear protection**
- **Powerful anti-wear performance under mixed friction conditions (high Brugger value)**
- **Powerful detergent / dispersant properties**
- **Excellent oxidation stability and good resistance to ageing**
- **Excellent corrosion protection**
- **Good compatibility with sealing materials**
- **Long lifetime**



RENOLIN MWB

Zinc- and ash-free hydraulic oils HLPD

Application

The RENOLIN MWB oils are high-performance hydraulic and lubricating oils which can be used in all hydraulic and lubricating systems. RENOLIN MWB oils are especially suitable for highly-stressed mobile and stationary hydraulic systems, e.g. in presses.

Specifications

RENOLIN MWB oils meet and in many cases exceed the requirements of:

- DIN 51 524-2: HLP
(except for demulsifying properties)
- DIN 51 517-3: CLP
- ISO 6743-4: HM
- ISO 6743-6: CKC
- ISO 11158: HM

The RENOLIN MWB oils are approved by e.g.:
Müller Weingarten, 88250 Weingarten, Germany

RENOLIN MWB

Zinc- and ash-free hydraulic oils HLPD

Typical data:

Product name		32	46	68	
Properties	Unit				Test method
Kinematic viscosity at 40°C	mm ² /s	32	46	68	DIN EN ISO 3104
at 100°C	mm ² /s	5,4	6,9	8,7	
Viscosity index	-	97	105	99	DIN ISO 2909
Density at 15°C	kg/m ³	878	882	879	DIN 51 757
Flashpoint, Cleveland open cup	°C	210	218	224	DIN ISO 2592
Pourpoint	°C	-24	-24	-18	DIN ISO 3016
Air release at 50°C	min	4	5	12	DIN ISO 9120
Copper corrosion (24 h/ 100°C)	Degree of corrosion	1	1	1	DIN EN ISO 2160
Steel corrosion	Degree of corrosion	0 – A	0 – A	0 – A	DIN ISO 7120
Brugger test	N/mm ²	≥ 50	≥ 50	≥ 50	DIN 51 347-2
FZG mechanical gear test rig, FZG A/8,3/90	Failure load stage	> 12	> 12	> 12	DIN ISO 14635-1
FE8 roller bearing wear test, D-7,5/80/80 (80°C, 80 kN)					DIN 51 819-3
Roller wear	mg	< 2	< 2	< 2	

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. All rights reserved.