

Bosch Rexroth Fluid Rating List

für Rexroth-Hydraulikkomponenten (Pumpen und Motoren)*

for Rexroth hydraulic components (pumps and motors)*









*Exception Hägglunds products, see 15414

Die unten genannten Hydraulikflüssigkeiten sind von der Bosch Rexroth AG positiv bewertet. Sie erfüllen die Bedingungen nach RD 90235 für eine Listung in der Bosch Rexroth Fluid Rating List 90245.

Hydraulic fluids mentioned below have been rated favourably by Bosch Rexroth AG. The requirements for listing according to RE 90235 on the Bosch Rexroth Fluid Rating List 90245 are fulfilled.

| Klassifizierung von Hydraulikflüssigkeiten / Hydraulic Fluids Classification | |
|--|---|
| Hydraulikflüssigkeiten auf Basis von Mineralölen und artverwandten Kohlenwasserstoffen / Hydraulic fluids based on mineral oil and related hydrocarbons | HL (HL), HLP (HM), HVLP (HV) und weitere / and other |
| Umweltverträgliche Hydraulikflüssigkeiten / Environmentally acceptable hydraulic fluids | HETG, HEPG, HEES, HEPR |
| Schwerentflammbare Hydraulikflüssigkeiten – wasserfrei / Fire-resistant, water-free hydraulic fluids | HFDR, HFDU und weitere / and other |
| Schwerentflammbare Hydraulikflüssigkeiten – wasserhaltig / Fire-resistant, water-containing hydraulic fluids | HFAE, HFAS, HFB, HFC und weitere / and other |
| Universal-Traktor-Getriebeöle (Fokus auf Hydraulikanforderungen) / Universal Tractor Transmission Oils (Focus on hydraulics requirements) | UTTO |
















Hydraulikflüssigkeiten auf Basis von Mineralölen und artverwandten Kohlenwasserstoffen / Hydraulic fluids based on mineral oil and related hydrocarbons

| Hersteller Manufacturer | Fluidname Fluid brand name | Legend | ISO VG | | | Kategorie Category | Gültig- keitsdatum bis Valid until |
|---|-------------------------------|--------|--------|----|----|-----------------------|---|
| | | | 32 | 46 | 68 | | |
|  ADNOC Distribution | ADNOC Hydraulic Oil H46 | 1 | – | ● | – | HLP (HM) | 2027 |
|  Aegean Marine Fuels & Lubricants FZE | Hydralfa 46 | 1 | – | ● | – | HLP (HM) | 2027 |
|  APAR Industries Ltd. | ENI OSO IM | 1 | – | ● | ● | HLP (HM) | 2026 |
| | Poweroil Hydrol HLP Pro | 1 | – | ● | ● | HLP (HM) | 2026 |
|  AVIA AG | AVIA FLUID HVR 46 | 1 | – | ● | – | HVLP (HV) | 2026 |
|  Bardahl de Mexico, S.A. de C.V. | BARDAHL HYDRAULIC OIL | 1 | ● | ● | ● | HLP (HM) | 2026 |
|  Belgien Madeni Yaglar Tic. ve San. A.S. | HIDROTEX BSX | 1 | ● | ● | ● | HLP(HM) | 2026 |
|  Bharat Petroleum Corporation Ltd | MAK Hydrol HLP | 1 | ● | ● | ● | HLP (HM) | 2026 |
|  BP | Castrol Hyspin AWS HX | 1 | ● | ● | ● | HLP (HM) | 2027 |
| | Castrol Hyspin ZZ HX | 2 | ● | ● | ● | HLP (HM) | 2026 |

Legende / Legend

- 1 Zinkhaltig / with zinc
- 2 Zinkfrei / without zinc

Hydraulikflüssigkeiten auf Basis von Mineralölen und artverwandten Kohlenwasserstoffen /
Hydraulic fluids based on mineral oil and related hydrocarbons

| Hersteller Manufacturer | Fluidname Fluid brand name | Legend | ISO VG | | | Kategorie Category | Gültig- keitsdatum bis Valid until |
|---|--|--|--------|----|----|-----------------------|---|
| | | | 32 | 46 | 68 | | |
|  | CEPSA COMERCIAL PETRÓLEO S.A.U | CEPSA HIDRAULICO HM | 1 | ● | ● | HLP(HM) | 2026 |
|  | Champion Chemicals N.V. | Champion HYDRO | 1 | ● | ● | HLP (HM) | 2026 |
|  | Chevron, Texaco, Caltex | Rando HD | 1 | ● | ● | HLP (HM) | 2027 |
| | | Rando HDZ | 1 | ● | ● | HVLP (HV) | 2029 |
|  | CNH Industrial | Premium Hydraulic Oil HM | 1 | ● | ● | HLP (HM) | 2026 |
| | | Premium Hydraulic Oil HV | 1 | – | ● | HVLP (HV) | 2027 |
| | | Tutela Hydrosystem AW | 1 | ● | ● | HLP (HM) | 2027 |
| | | Tutela Hydrosystem HV NT | 1 | ● | ● | HVLP (HV) | 2028 |
| | | Tutela Hydrosystem HV SSL | 1 | – | ● | HVLP (HV) | 2029 |
|  | CPC Corporation, Taiwan | CPC Hydraulic Oil AWS | 1 | ● | ● | HLP (HM) | 2027 |
|  | ENOC Marketing LLC | ENOC AXIS | 1 | ● | ● | HLP (HM) | 2026 |
|  | ExxonMobil | Mobil DTE 10 Excel | 2 | ● | ● | HVLP (HV) | 2026 |
| | | Mobil DTE 20 Ultra | 1 | ● | ● | HLP (HM) | 2029 |
| | | Mobil DTE Hydraulic Zinc Free Series | 2 | ● | ● | HLP (HM) | 2026 |
|  | Federated Co-operatives Limited | Co-op Hydraulic oil | 1 | ● | ● | HLP(HM) | 2028 |
|  | Fuchs Lubricants Germany GmbH | Renolin B HP Plus | 1 | ● | ● | HLP (HM) | 2026 |
| | | Renolin B HVI Plus | 1 | ● | ● | HVLP (HV) | 2030 |
| | | Renolin B Plus | 1 | ● | ● | HLP (HM) | 2026 |
| | | Renolin Xtreme Temp | 1 | ● | ● | HVLP (HV) | 2028 |
| | | Renolin ZAF MC | 2 | ● | ● | HVLP (HV) | 2029 |
|  | Georg Oest Mineralölwerk GmbH & Co. KG | Hydrauliköl HVLP 46 NI | 1 | – | ● | HVLP (HV) | 2028 |
|  | GS Caltex Corporation | Kixx Hydro XW | 1 | ● | ● | HLP (HM) | 2026 |
| | | Kixx Hydro XZ | 1 | ● | ● | HVLP(HV) | 2028 |
|  | Groupe MECALAC S.A.S. | MECALAC Premium Lubricants Hydraulic Oil | 1 | – | ● | HVLP (HV) | 2027 |
|  | Gulf Oil International Limited | Harmony AW Premium | 1 | ● | ● | HLP (HM) | 2026 |
| | | Harmony ZF HVI Premium | 2 | ● | ● | HVLP(HV) | 2029 |
|  | GÜZEL ENERJİ AKARYAKIT A.S. | M Oil HIDROMOL | 1 | – | ● | HLP (HM) | 2026 |
|  | Hardcastle Petrofer PVT. LTD | HILUBRIC HLP SP | 1 | ● | ● | HLP(HM) | 2027 |
|  | Hermann Bantleon GmbH | Avia Fluid RSL Plus | 1 | ● | ● | HLP(HM) | 2027 |

Legende / Legend

1 Zinkhaltig / with zinc

2 Zinkfrei / without zinc

Hydraulikflüssigkeiten auf Basis von Mineralölen und artverwandten Kohlenwasserstoffen /
Hydraulic fluids based on mineral oil and related hydrocarbons
















| Hersteller Manufacturer | Fluidname Fluid brand name | Legend | ISO VG | | | Kategorie Category | Gültig- keitsdatum bis Valid until |
|---|---|--|--------|----|----|-----------------------|---|
| | | | 32 | 46 | 68 | | |
|  | Hindustan Petroleum Corporation Limited | ENKLO HLP T PLUS | 1 | ● | ● | HLP(HM) | 2028 |
|  | Indian Oil Corporation Limited | Servosystem XLP Gold | 1 | ● | ● | HLP (HM) | 2026 |
| | | Servosystem XLP Star (L) | 1 | ● | ● | HLP (HM) | 2027 |
|  | Jiangsu Lopal Tech. Co.,Ltd. | Lopal Hypal M1 | 1 | ● | ● | HLP (HM) | 2026 |
|  | RAJ Petro Specialities PVT. LTD. | Kyros HydraPremium HM | 1 | ● | ● | HLP (HM) | 2028 |
|  | Liqui Moly GmbH | Liqui Moly Hydrauliköl HyPER SG1 | 1 | ● | ● | HLP (HM) | 2028 |
|  | LLC KSM PROTEC | PROTEC HYDROIL HM+ | 1 | – | ● | HLP(HM) | 2026 |
|  | Meguín GmbH & Co. KG | Meguín Spezial-Hydraulikoel 46 | 1 | – | ● | HLP(HM) | 2028 |
|  | MOL-LUB Kft. | MOL Hydro HME | 1 | ● | ● | HLP (HM) | 2026 |
| | | MOL Hydro Prime HV ZF | 2 | ● | ● | HVLP (HV) | 2029 |
|  | NILS S.p.A. | RITOMA HVLP 46 | 1 | – | ● | HVLP(HV) | 2028 |
|  | Orlen Oil Sp. z o.o. | HYDROL HEAVY L-HM/HLP | 1 | ● | ● | HLP(HM) | 2028 |
|  | Pakelo Motor Oil S.P.A. a s.u. | PAKELO HYDRAULIC EP EVO | 1 | ● | ● | HVLP(HV) | 2029 |
|  | Palfinger AG | Hydraulic Oil Premium | 1 | ● | ● | HVLP (HV) | 2027 |
|  | Petro Canada Lubricants Inc. | HYDREX AW | 1 | ● | ● | HLP (HM) | 2026 |
| | | HYDREX MV | 1 | ● | ● | HVLP (HV) | 2028 |
|  | PetroChina Lubricant Company | Kunlun HM 32, 46, 68 Anti-wear Hydraulic Oil (High Pressure H) | 1 | ● | ● | HLP (HM) | 2026 |
|  | Petrol Ofisi A.S. | Hydro Oil HD | 1 | ● | ● | HLP (HM) | 2026 |
|  | Petromin | Hydraulic Oil AW RX 68 | 1 | – | – | HLP (HM) | 2026 |
|  | Petronas Lubricant International | Petronas Hydraulic Plus | 1 | ● | ● | HLP (HM) | 2027 |
| | | Petronas Hydraulic HV Plus | 1 | ● | ● | HVLP (HV) | 2029 |
| | | Petronas Tutela Hydraulic HV LL | 1 | ● | ● | HVLP (HV) | 2028 |
| | | Petronas Tutela Hydraulic HVI Artic | 1 | ● | ● | HVLP (HV) | 2029 |
|  | Phillips 66 Company | Powerflow NZ Hydraulic Oil L-HM | 2 | ● | ● | HLP (HM) | 2026 |
|  | PKN Orlen S.A. | HYDROMIL L-HM BA | 1 | ● | ● | HLP (HM) | 2027 |
|  | Puma Energy International | Puma Hydraulic Oil HVI | 1 | – | ● | HVLP (HV) | 2028 |
|  | Quaker Houghton | QH QUANTOL DRIVE AW 3000 XP Series | 1 | ● | ● | HLP (HM) | 2026 |
|  | Qingdao Copton Technology Co., Ltd. | Copton Wei Li Da | 1 | – | ● | HLP (HM) | 2026 |

Legende / Legend:

1 Zinkhaltig / with zinc

2 Zinkfrei / without zinc

Hydraulikflüssigkeiten auf Basis von Mineralölen und artverwandten Kohlenwasserstoffen /
Hydraulic fluids based on mineral oil and related hydrocarbons





| Hersteller Manufacturer | Fluidname Fluid brand name | Legend | ISO VG | | | Kategorie Category | Gültig- keitsdatum bis Valid until |
|---|---|--------|--------|----|----|-----------------------|---|
| | | | 32 | 46 | 68 | | |
|  Q8 OILS | Q8 Henry | 1 | ● | ● | ● | HLP (HM) | 2028 |
|  RALOY | RALOY Lubricantes, S.A. de C.V. | 1 | ● | ● | ● | HLP (HM) | 2026 |
|  REPSOL | Repsol Lubricantes y Especialidades S.A. | 1 | ● | ● | ● | HLP (HM) | 2026 |
|  ROPA | ROPA Fahrzeug- und Maschinenbau GmbH | 1 | – | ● | – | HVLP (HV) | 2026 |
|  零公里润滑油 | Shandong Zero Mileage Lubrication Technology Co., Ltd | 1 | – | ● | – | HLP (HM) | 2026 |
|  THO 太行润滑油 | Shanxi Lu-'an Taihang | 1 | – | ● | ● | HLP (HM) | 2026 |
|  | Shell International Petroleum Company | 1 | ● | ● | ● | HLP (HM) | 2026 |
| | | 1 | ● | ● | ● | HVLP (HV) | 2027 |
| | | 1 | ● | ● | ● | HLP (HM) | 2026 |
| | | 1 | ● | ● | ● | HVLP (HV) | 2029 |
| | | 2 | ● | ● | ● | HLP (HM) | 2029 |
| | | 2 | ● | ● | ● | HVLP (HV) | 2029 |
|  | Sineng Petrochemical Co., Ltd. | 1 | – | ● | ● | HLP (HM) | 2026 |
| | | 1 | – | ● | – | HLP (HM) | 2026 |
|  SINOPEC 长城润滑油 | Sinopec Lubricant Co., Ltd | 1 | ● | ● | ● | HLP (HM) | 2026 |
| | | 1 | ● | ● | ● | HLP (HM) | 2029 |
| | | 1 | ● | ● | ● | HLP (HM) | 2026 |
|  SRS SCHMIERSTOFF VERTRIEB GMBH | SRS Schmierstoff Vertrieb GmbH | 1 | ● | ● | ● | HLP (HM) | 2028 |
| | | 1 | ● | ● | ● | HVLP (HV) | 2026 |
|  Veedol | Tide Water Oil Co. (India) Ltd. | 1 | ● | ● | ● | HLP (HM) | 2026 |
|  TIGER PETROLEUM | Tiger Petroleum (China) Co., Ltd | 1 | ● | ● | ● | HLP (HM) | 2026 |
|  Monarch | TongYi Petroleum Chemical Co., Ltd. | 1 | ● | ● | ● | HLP (HM) | 2028 |
|  TotalEnergies | TotalEnergies | 2 | ● | ● | ● | HLP (HM) | 2028 |
| | | 1 | ● | ● | ● | HLP (HM) | 2026 |
| | | 1 | ● | ● | ● | HLP (HM) | 2026 |
| | | 1 | – | ● | – | HVLP (HV) | 2026 |
| | | 2 | ● | – | – | HLP (HM) | 2026 |
|  Unil LUBRIFIANTS opal | Unil Opal | 1 | – | ● | – | HLP (HM) | 2026 |

Legende / Legend





1 Zinkhaltig / with zinc

2 Zinkfrei / without zinc


Hydraulikflüssigkeiten auf Basis von Mineralölen und artverwandten Kohlenwasserstoffen /
Hydraulic fluids based on mineral oil and related hydrocarbons

| Hersteller Manufacturer | Fluidname Fluid brand name | Legend | ISO VG | | | Kategorie Category | Gültigkeitsdatum bis Valid until |
|---|---|-----------------------------|--------|----|----|-----------------------|-------------------------------------|
| | | | 32 | 46 | 68 | | |
|  | Valvoline | Valvoline HLP IMEX | 1 | ● | ● | HLP (HM) | 2027 |
| | | Valvoline HLP IMEX ZF | 2 | – | ● | HLP (HM) | 2026 |
| | | Valvoline Ultramax PRO HLP | 1 | ● | ● | HLP (HM) | 2026 |
| | | Valvoline Ultramax PRO HVLP | 1 | ● | ● | HVLP (HV) | 2026 |
|  | Wolf Oil Corporation N.V. | WOLF AROW | 1 | ● | ● | HLP (HM) | 2026 |
|  | Xinxiang Richful Lube Additive Co., Ltd | Richful HLP | 1 | ● | ● | HLP (HM) | 2027 |
|  | Zeller + Gmelin GmbH & Co. KG | Divinol HLP ISO VG 46 HBR | 1 | – | ● | HLP (HM) | 2026 |

Umweltverträgliche Hydraulikflüssigkeiten /
Environmentally acceptable hydraulic fluids

| Hersteller Manufacturer | Fluidname Fluid brand name | Legend | ISO VG | | | Kategorie Category | Gültigkeitsdatum bis Valid until |
|---|-------------------------------|--|--------|----|----|-----------------------|-------------------------------------|
| | | | 32 | 46 | 68 | | |
|  | Lube Oil GmbH ADDINOL | ADDINOL NatureProof HLP EL | 3 | ● | ● | HEES | 2029 |
| | | ADDINOL NatureProof HLP S | 3 | ● | ● | HEES | 2029 |
|  | Hermann Bantleon GmbH | Syntofluid BRO | 3 | ● | ● | HEES | 2027 |
|  | KLEENOIL AG | KLEENOIL ECO HLP | 3 | ● | ● | HEES | 2029 |
| | | KLEENOIL ECO HLP EL | 3 | ● | ● | HEES | 2029 |
|  | PANOLIN Distribution AG | Shell PANOLIN S4 HLP Synth Formerly known as: PANOLIN HLP SYNTH | 3 | ● | ● | HEES | 2027 |

Universal-Traktor-Getriebeöle – UTTO (Fokus auf Hydraulikanforderungen) /
Universal Tractor Transmission Oils – UTTO (Focus on hydraulics requirements)

| Hersteller <i>Manufacturer</i> | | Fluidname <i>Fluid brand name</i> | Legend | Viskosität bei <i>Viscosity at</i> 40°C [mm²/s] | Kategorie <i>Category</i> | Gültigkeits- datum bis <i>Valid until</i> |
|---|----------------|---|--------|---|------------------------------|---|
|  | CNH Industrial | Hydraulic Transmission Oil - Premium | 1 | 59 | UTTO | 2028 |
| | | HY-TRAN Premium Hydraulic Transmission Oil | 1 | 59 | UTTO | 2028 |

Legende / Legend

- 1 Zinkhaltig / with zinc
- 2 Zinkfrei / without zinc
- 3 gesättigter / saturated ester
- 4 ungesättigter Ester / unsaturated ester

Von der Bosch Rexroth AG positiv bewertete Hydraulikflüssigkeiten dürfen von den Schmierstoffherstellern in deren Datenblättern oder sonstigen Publikationen mit folgendem Vermerk geführt werden:

Erfüllt die Anforderungen gemäß Bosch Rexroth RDE 90235 oder Bosch Rexroth Fluid Rating List RDE 90245.
Nicht oder negativ bewertete Hydraulikflüssigkeiten dürfen diesen Vermerk nicht führen.

Hydraulic fluids rated favourably by Bosch Rexroth AG may be listed by the lubricant manufacturers in their data sheets or other publications with the following note:

Meets the requirements of Bosch Rexroth RDE 90235 or Bosch Rexroth Fluid Rating List RDE 90245.

Hydraulic fluids that have not been rated or that have been rated negatively may not carry this note.

Hinweise

- ▶ Fluid- und anlagenspezifische Besonderheiten sind bei der Projektierung zu berücksichtigen.
- ▶ Die Angaben in den Anwendungshinweisen 90220, 90221, 90222 und 90223 sind zu beachten.
- ▶ MCR-Motoren mit Haltebremse:
Die Leistungsdaten der MCR-Bremse basieren auf dem Betrieb der Anlage mit Mineralöl Typ HLP/HVLP nach DIN 51524. Die Verwendung eines anderen Flüssigkeitstyps kann die Bremsleistung beeinträchtigen, insbesondere HEES-Flüssigkeiten stellen ein bekanntes Risiko dar. Bei Rückfragen kontaktieren Sie bitte Bosch Rexroth Engineering in Glenrothes.
- ▶ Ausgedruckte Listen sind nicht verbindlich, die aktuelle Version ist im Bosch Rexroth Medienverzeichnis abrufbar: www.boschrexroth.com/fluidratinglist

Notes

- ▶ *Fluid and system-specific characteristics are to be taken into account during project planning.*
- ▶ *The information in the application instructions 90220, 90221, 90222 and 90223 is to be observed.*
- ▶ *MCR motors with holding brake:
The MCR brake performance data is based on the system operating with Mineral Oil type HLP/HVLP to DIN 51524. Use of any other fluid type may reduce brake performance, HEES fluids are a particular known risk. Contact the Engineering Department at Bosch Rexroth Glenrothes for advice.*
- ▶ *Printed lists are not obligatory, the current version is available in the Bosch Rexroth media directory: www.boschrexroth.com/fluidratinglist*

Bosch Rexroth AG

Glockeraustraße 2
89275 Elchingen, Germany
Tel. +49 7308 82-0

An den Kelterwiesen 14
72160 Horb, Germany
Tel. +49 7451 92-0

info.ma@boschrexroth.de
www.boschrexroth.com

© Bosch Rexroth AG 2016. Alle Rechte vorbehalten, auch bzgl. jeder Verfügung, Verwertung, Reproduktion, Bearbeitung, Weitergabe sowie für den Fall von Schutzrechtsanmeldungen. Die angegebenen Daten dienen allein der Produktbeschreibung. Eine Aussage über eine bestimmte Beschaffenheit oder eine Eignung für einen bestimmten Einsatzzweck kann aus unseren Angaben nicht abgeleitet werden. Die Angaben entbinden den Verwender nicht von eigenen Beurteilungen und Prüfungen. Es ist zu beachten, dass unsere Produkte einem natürlichen Verschleiß- und Alterungsprozess unterliegen.

© Bosch Rexroth AG 2016. All rights reserved, also regarding any disposal, exploitation, reproduction, editing, distribution, as well as in the event of applications for industrial property rights. The data specified within only serves to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.