



ROYAL  OIL



PRODUCT RANGE

AUTOMOTIVE AND
INDUSTRIAL PRODUCTS



WE PRODUCE BRANDED LUBRICANTS

Royal Oil is a medium-sized Independent company. Royal Oil develops, produces and distributes high quality lubricants and specialties since more than 40 years.

Our products meet the national and international standards and are doing development, production, filling and distribution carefully monitored by our own quality-laboratory.

Royal Oil is accredited according to DIN EN ISO 9001. ISO/TS 1 6949:2009 and OHSAS 180012007.

QUALITY, RELIABILITY, FLEXIBILITY
AND SERVICE FROM A SINGLE SOURCE,
IS APPRECIATED BY OUR CUSTOMERS
FOR MANY YEARS.



WE PRODUCE BRANDED LUBRICANTS

- 93 tanks of 6 m³ to 1.500 m³ with a total capacity of 9.000 m³
- 14 blenders of 1 to 40 m³
- 12 mixing tanks of 150 to 250 m³
- 12 automatic and semi-automatic filling lines, for the filling of 0,25 L bottles up to 1.000 L containers
- 2x 50-tons weighbridges for the loading of tank trucks

Royal Oil has a production capacity of 80.000 tons of lubricants per year, this makes Royal Oil one of the largest independent producer lubricants in Germany.





WE PRODUCE BRANDED LUBRICANTS

OVERVIEW

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ROYAL OIL
SX
SYN
ACEA A3/B4 - AP
 TEILSYNTHETISCH
 BENZIN- UND DIESEL
 SCHWACHZITZER.
 SEMI-SYNTHETIC
 GASOLINE AND DIESEL
 MULTIGRADE.

MADE IN GERMANY


ROYAL OIL
GEAR OIL 4
MT85W-140
SPEZIFIKATION | SPEZIFICATION:
 API GL-4 · MB 235.1 · MAN 341 Z-1
 ZF TE-ML 02B, 16A, 17A, 19C
MT
MEHRZWECK-EP-BETRIEBÖL FÜR SYNCHRONISIERTE
 UND NICHT SYNCHRONISIERTE SCHALTGETRIEBE SOWIE
 BESTIMMTE LENK- UND ACHSGETRIEBE.
 EP-BEAR OIL FOR SYNCHRONIZED AND NON-
 SYNCHRONIZED MANUAL TRANSMISSIONS AND CERTAIN
 STEERING GEARS AND AXLE DRIVES.

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MADE IN GERMANY



MULTIGRADE ENGINE OILS FOR PASSENGER CARS AND LIGHT COMMERCIAL VEHICLES

Product Designation		Performance level		Product description
		API	ACEA	
R-Primo LDI	SAE 0W-30		A5/B5	Low friction oil, especially for use in passenger car gasoline and diesel engines. Approved (under different brand name) according VW 503 00/ 506 00 / 506 01 and BMW-Longlife 01 FE.
R-Primo VS	SAE 0W-40	SN/CF	A5/B5	Fully synthetic high-performance oil for gasoline and diesel engines. Meets i. a. the requirements of VW 502 00/505 00, Renault RN 0700/0710 and Porsche A40. Approval according BMW Longlife-01 and MB-approval 229.5.
R-Primo SLV	SAE 5W-30		A5/B5/C1	High performance low friction oil for the latest models of passenger car- and van- motors, which are operating with diesel fuel or gasoline. Meets i.a. the requirements of Mitsubishi DPF and JASO DL-1
R-Primo CVS	SAE 5W-30	SL/CF	A3/B4	High performance low friction oil, especially for modern enhanced injection-and turboengines. Meets i.a. the requirements of VW 502 00/ 505 00, MB 229.5, BMW Longlife-01, Opel LL-A-025/-B-025 and Porsche.
R-Primo DPF	SAE 5W-30		A3/B4/C3	HC-synthesis oil for passenger cars of the VW-group, for FSI-engines and for diesel-engines with partkulare filters and without. Approved (under different brand name) according VW 504 00 / 507 00.
R-Primo LLX	SAE 5W-30		C3	High performance low friction oil, which extends lifetime of exhaust-after-treatment-devices (Diesel Particulate filter; Catalytic Converter) of gasoline-and diesel-engines. Meets i.a. the requirements of Porsche C30. Approval according MB229.51, VW 50400/ 507 00 and BMW Longlife-04.
R-Primo DX	SAE 5W-30	SN/CF	A3/B4/C3	High performance low friction oil for gasoline-and diesel-engines in passenger cars. Meets i.a the requirements of GM dexos 2. Approval according VW 502 00 / 505 00 / 505 01 (unit-injector), BMW Longlife-04 and MB-approval 229.51 (covers MB 22931).
R-Primo GM	SAE 5W-30	SL/CF	A3/B4	High performance low friction oil for gasoline- and diesel-engines in passenger cars. Suitable especially for Opel LL-A-025/-B-025.
R-Primo SMF	SAE 5W-30	SN	A5/B5/C2	All-seasons oil for all those passenger car engines, which require fuel economy (FE) oils. Meets i.a. the requirements of Honda, Hyundai, KIA, Mazda, Subaru, ILSAC GF-4, GM 6094 M, Ford WSS-M2C 913-D, (covers 913-A,-B and -C) and Ford WSS-M2C 929-A.
R-Primo DXM	SAE 5W-40	SN/CF	A3/B4/C3	High performance low friction oil of the new "Low SAP"- generation for passenger car engines with exhaust after treatment devices (catalytic converter, diesel partkultate filter) and without Meets i.a. the requirement of Porsche A 40, Renault RN 0700 /RN 0710 und Ford WSS-M2C 917-A. Approval according VW 502 00 / 505 00 / 505 01 (unit-injector), BMW Longlife-04 and MB-aproval 229.51 (covers MB 229.31).
R-Primo HDC	SAE 5W-40	SN/CF	A3/B4	Newest generation high-performance low friction oil for passenger cars and light commercial vehicles. Meets i.a. the requirements of Porsche A 40, Renault RN 0700/RN 0710, Opel GM-LL-B-025 and PSA B71 2296. Approval according VW 502 00 / 505 00 and MB-approval 229.3.
R-Primo Power Synth. CS	SAE 10W-40	SN/CF	A3/B4	High performance low friction oil for gasoline and diesel engines. Even under difficult conditions ideally suited for use in modern engines with-and without turbo chargers as well as in light com medal vehicles. Meets i.a the requirements of VW 502 00/ 505 00 and MB 2293 (covers MB 229.1).
R-Primo TS	SAE 10W-40	SL/CF	A3/B4	High-performance low friction oil for gasoline and diesel engines. Approval according VW 502 00 / 505 00 and MB-approval 229.3.
R-Primo Power Synth.	SAE 10W-40	SL/CF	A3/B4	Semi-synthetic low friction oil for gasoline and diesel engines. Excellent suitable in modern passenger car engines, turbo- or non-turbo charged. Meets i.a. the requirements of VW 505 00. Approval according MB-approval 229.1.
R-Primo GT	SAE 15W-40	SL/CF	A3/B4	High-performance oil for gasoline and diesel engines in passenger cars and light commercial vehicles. Especially suited for turbo chargers and multi-valve engines. Meets i.a. the requirements of VW 501 01 / 505 00 and MB 229.1.



AUTOMOTIVE PRODUCTS

MULTIGRADE ENGINE OILS FOR PASSENGER CARS AND LIGHT COMMERCIAL VEHICLES

Product Designation		Performance level		Product description
		API	ACEA	
R-Promot GD	SAE 10W-40	SG/CD/ CF-4		Low friction oil for exalted requirements. Suitable for all-seasons use in gasoline- and diesel engines. To be used also under severe winter conditions.
R-Promot FD	SAE 10W-40	SF/CD		Fuel economy oil for older gasoline and diesel engines with turbo chargers and without. Qualified for all-seasons use, also under severe winter conditions.
R-Promot FD	SAE 15W-40	SF/CD		Multigrade engine oils for prior gasoline and diesel engines with turbo chargers and without. Qualified for all-seasons use in temperate zones (SAE 15W40) and in warm zones (SAE 20W50).
R-Promot FD	SAE 20W-50	SF/CD		
R-Promot FF	SAE 15W-40	SF/CF/CF-4		Multigrade engine oil for gasoline and diesel engines of conventional designs with turbo chargers. Qualified for all-seasons use.

MONOGRADE ENGINE OILS

Product Designation		Performance level		Product description
R-Promot FF	SAE 10W SAE 20W-20 SAE 30 SAE 40 SAE 50	SF/CF		Economical HD oils for heavily loaded diesel engines. Also suitable for gasoline engines which make normal demands on the lubricant and for those where no higher alloyed engine oils are necessary or specified.
R-Promot FD	SAE 10W SAE 20W-20 SAE 30 SAE 40 SAE 50	SF/CD		HD oils for gasoline and diesel engines which make normal demands on the engine oil and for those where no higher alloyed engine oils are needed or specified. Depending on the manufacturer's specification Promotol FD monograde oils can also be used as air compressor oils according to DIN 51 506.



MULTIGRADE ENGINE OILS

Product Designation		Performance level		Product description
		API	ACEA	
R-Synergie Racing	SAE 5W-50	SN/CF	A3 / B4	Fully synthetic high performance low friction oil for racy high-tech gasoline and diesel engines of passenger cars.
R-Synergie Racing	SAE 10W-40	SF/CD		Fully synthetic high performance low friction oil for racy high-tech gasoline and diesel engines of passenger cars.

FOUR STROKE OILS FOR MOTORCYCLE

Product Designation		Performance level		Product description
		API	ACEA	
R-Fouke 4T	SAE 10W-40	SL	A3	High performance special oil for motorcycles with air- or water-cooled 4-stroke engines of highest output. Meets i.a. the requirements of JASO MA.
R-Fouke 4T	SAE 10W-50	SL	A3	High performance special oil for motorcycles with air-or water-cooled 4-stroke engines of highest output. Meets i.a. the requirements of JASO MA.
R-Fouke 4T	SAE 10W-60	SL	A3	High performance special oil for motorcycles with air- or water-cooled 4-stroke engines of highest output. Meets i.a. the requirements of JASO MA
R-Fouke 4T	SAE 15W-50	SL	A3	High performance special oil for motorcycles with air- or water-cooled 4-stroke engines of highest output. Meets i.a. the requirements of JASO MA.
R-Fouke 4T	SAE 20W-50	SL	A3	High performance special oil for motorcycles with air- or water-cooled 4-stroke engines of highest output. Meets i.a. the requirements of JASO MA.

TWO STROKE ENGINE OILS

Product Designation	Performance level	Product description
	API	
R-Twoke Synmix Ultra	TC (JASO FD) (ISO-L-EGD)	Fully synthetic high-performance 2-stroke oil for water- or air-cooled racing and road-engines with separate or petroil lubrication. Developed especially for high speed engines.
R-Twoke Premix TC	TC (JASO FD) (ISO-L-EGD)	Semi-synthetic 2-stroke engine oil for universal use in petroil and separate lubricated units, especially in high-performance engines of motor vehicles, mopeds, chain saw drives, snowmobiles etc.
R-Twoke Outboard PM	NMMA TC-W3	Semi-synthetic, self-mixing two-stroke engine oil, which is intended for use in fresh water-cooled outboard motors.



AUTOMOTIVE PRODUCTS

AUTOMATIC TRANSMISSION FLUIDS

Product Designation	Performance level	Product description
R-ATF TASA	Type A, Suffix A	Automatic transmission fluid for use in automatic transmissions and torque converters. Meets i.a. the requirements of MB 236.2, MAN 339 type A and Renk (Doromat).
R-ATF DX II D	GM Dexron II D	Advanced transmission fluid for universal use in automatic transmissions, steering boosters and hydraulic units. Meets i.a. the requirements of MB 236.7, Voith, Allison C-3/C-4, MAN 339 type D, ZF TE-ML 03D, 04D, 09A, 11A, 14A, Ford SQM-9010B; Ford M2C-138CJ, 166H, 185A and Caterpillar TO-2.
R-ATF DX III H	GM Dexron III H	Automatic transmission fluid for automatic transmissions, steering boosters, fluid couplings, hydrodynamic converters and for hydraulics in motor cars, trucks, busses and construction vehicles. Meets i.a. the requirements of Voith, MB 236.1 & 236.5, Allison C-4, MAN 339 type F, ZF TE-ML 02F, 03D, 04D, 11B, 14A and Caterpillar TO-2.
R-ATF JaKo	GM Dexron III H	Automatic Transmission Fluid for Asian vehicles. To be used in automatic transmissions, steering boosters, fluid couplings, hydrodynamic converters and for hydraulics in motor cars, trucks, busses and construction vehicles. Meets i.a. the requirements of JASO M315 Type 1 A, Toyota Type D-2, T, T-II, T-III and T-IV, Mazda ATFD-III, ATF M-3, Mitsubishi SP-II and SP-III, Suzuki ATF Oil and ATF Oil Special, Mercon, Kia, Hyundai and Nissan Matic Fluid C, D and J.
R-ATF Plus 4	GM Dexron III	Synthetic high performance ATF for life-time use in modern motor car transmissions. Exceeds any Dexron III-requirements and it is also miscible with Dexron IID and Dexron III-ATFs. Meets i.a. the requirements of Voith Turbo corresponding H55 6336.35 for extended drain intervals (120.000 km) and ZF-TE-ML 11B.
R-ATF MB III	GM Dexron III	Life-Time ATF for Mercedes Automatic Transmissions. It is made from synthetic base oils and such from the synthesis technology plus an outstanding performance package. Meets i.a. the requirements of MB 236.11, MB 236.12 and MB 236.14.
R-ATF Dexron VI	GM Dexron VI	Automatic transmission fluid suitable for many European, American and Asian OEM's. Meets i.a. the requirements of Audi G 052025-A2, Audi G052 162-A1, BMW LA2634, BMW LT 71141, BMW 5 Series, ETL-8072B, BMW 7045E, Chrysler ATF +3/+4, Daimler NAG 1, Volvo 4-6 Speed, Volvo 97340, Volvo 97341, Voith H55.6335.xx, Voith H55.6336.xx, Allison C-4, Allison TES-295, JASO 1-A, Ford Mercon*-V, VW TL 52162, Honda Z-1, Asian AW-1, JWS 3309, JATCO 3100 PL085, JWS 3324, Mazda ATF-III, ATF-MV, Nissan Matic D/J/S, N402, NWS-9638, Subaru SP-II, SP-III, Toyota HI, T-IV, Toyota WS, MAN 339 Type V-1/V-2/Z-1/Z-2, MB 236.1, MB 236.2, MB 236.5, MB 236.6, MB 236.7, MB 236.9, MB 236.10, MB 236.11 and ZF TE-ML 02F, 03D, 04D, 05L.09, 11B, 14A, 14B, 16L, 17C.
NEW R-ATF Spezial CVT		High performance transmission fluid, developed for the newest generation of CVT-transmissions. Meets i.a. the requirements of MB 23620, MB A 0019894603, BMW 8322 0136 376, BMW 8322 0429 1 59, Ford CVT 23, Ford WSS-M2C92&A, GLWSaturn DEX-CVT, VWG 052180, JASO M358, Mitsubishi NS-IVSFMILCVT J-1, Mopar CVTF+4, Hyundai MCIASP-II, Suzuki TC7NS-II, Nissan NS II, Toyota, Honda, Subaru and Daihatsu TC
NEW R-ATF DSG		High performance transmission fluid, developed for the newest generation of DSG-transmissions, recommended for Audi- and VW-double clutch transmissions, needs ATF oil part-No. TL 52182. Meets i.a. the requirements of Audi A/oksvvogen/Seat/Skoda-DQ250, DQ 500 and DL 501, BMW-7DC1600, D0700, Citroen/Nissan/Peugeot-6DCT451, Ford/Getra^60CT45Q 600451 and 7DCT300, Mercedes Benz-FOCT350 and FOCT500, Porsche ZF-7DT45HL, 7DT45HLA, 7DT45R, 7DFL, 7DT70HLA 7DT75 and 7DT75A Mitsubishi-6DCT470 and Volvo 6DCT40.



AUTOMOTIVE PRODUCTS

AUTOMOTIVE GEAR OILS

Product Designation		Performance level API	Product description
R-Synkrol 4 TS	SAE 75W-90	GL-4	Semi-synthetic low friction EP gear oil for synchronmesh and non-synchronmesh manual gears as well as for certain steering gears and axle drives. Meets i.a. the requirements of MAN 341 E-1 + Z-2, MB 235.1 and ZF TE-ML 02B, 16A, 17A, 19C.
R-Synkrol 4	SAE 80W SAE 80W-90 SAE 85W-90	GL-4	Multipurpose EP gear oil for synchronmesh and non-synchronmesh manual gears as well as for certain steering gears and axle drives. Meets i.a. the requirements of MB 235.1, MAN 341 Z-1 and ZF TE-ML 02B, 16A, 17A, 19C.
R-Synkrol 5	SAE 80W SAE 85W-90 SAE 85W-140	GL-5	Hypoid gear oil for heavily stressed rear axle drives, distributor-, intermediate- and secondary gears in motor vehicles and machine tools. Meets i.a. the requirements of MAN 342 M-2, MIL-L-2105D and ZF TE-ML 05A, 07A, 12E, 16B-D, 17B, 19B, 21A.
R-Synkrol 4.5 Synth.	SAE 75W-90	GL-4 and GL-5	Fully synthetic universal gear oil of the highest performance class with excellent fuel economy properties and extreme load-carrying capacity. Meets the requirements of MIL-PRF2105 D & E, MAN 3343, MB 235.6 and ZF TE-ML 02B, 05A, 07A, 08, 16B, 17A+B.
R-Synkrol 5 LS	SAE 85W-90	GL-5	Special gear oil for axle drives with limited-slip differentials. Meets i.a. the requirements of MAN 342 Typ M-1, MB 235.0, MIL-L-2105D, Volvo 97310, Volvo 97311 and ZF TE-ML 05C, 12C, 21C.

UNIVERSAL OILS FOR AGRICULTURAL AND CONSTRUCTION MACHINERY

Product Designation		Performance level API ACEA	Product description
R-Unitractor STOU	SAE 10W-30	CF/CG-4/ E3 SF/GL-4	Universal oil for supplying any machinery and units in the agricultural sector. Meets i.a. the requirements of All bon C4, Case NH MAT3525/3526, Ford M2C 159B+C, MF M 1139/ 1144, JD J27, ZF 06A/B/C and MB 227.1
R-Supertractol STOU HC	SAE 10W-40	CG-4/ E3 GL-4	All-seasons multigrade oil to be used in all types of agricultural machineries. Meets i.a. the requirements of Allison C4, Case M5/1118/1207/1209/MAT3525/CS/CVX, Ford M2C 159-B and-C, Ford M2C86-B and-C and Ford M2C134-D, MF MI 135 to 1145, ZFTE-ML-06B (inc. 06R), -06C and -07B, JD JDM/J20C and J27, New Hoi land NH 410B/420A and 526C, Fendt Vario and Same-Deutz-Lamborghini-HirlimannT3245/3340/3345G445/3450 and 3550.
R-Unitractor TOU	SAE 80W-85	GL-4	For supplying transmissions, hydraulics and wet brakes in tractors, forestry and construction machinery of any types. Meets i.a. the requirements of Allison C3/C4, Ford M2C134D, M2C86A-C, MF M 1143/1145, JD J20C/D, ZF 03E, 06, Case MS 1204-1207/1209/1210 and Caterpillar TO-2.
R-Hytractol UTTO		GL-4	Hydraulic transmission fluid for tractors, forestry-, construction- and agrarian machineries to supply universally gears, hydraulics, clutches and wet brakes. Meets the requirement HVLP-D standard DIN 51524, part 3 (except demukibility) and meets i.a. the requirements of Allison C4, Ford ESN-M2C134D, Ford ESN-M2C86-B and -C, Ford NH 420A and 410 B, MFCMSM1135/1141/1143 and 1145, JD JDM J20C/D, -ZF-TE ML03E.05F, 06K and 17E, Case New Holland CNH MAT-3505, -3509 and -3525, Case MS 1207/1209/1210, Volvo CE WB 101, FNHA-2-C-200.00, Kubota UDT Fluid, AXO 80 (KE507.866) and CaterpillarTO-2.



AUTOMOTIVE PRODUCTS

MULTIGRADE ENGINE OILS FOR MIXED FLEETS

Product Designation		Performance level		Product description
		API	ACEA	
R-Favorit LMF	SAE 10W-40	CI-4 / SL	E7, B4, A3	Maximum performance low friction oil for modern diesel and gasoline engines with turbo charger. Meets i.a. the requirements of Cummins CES 20077/20078, Renault Truck RLD/RLD-2, MackEO-M Plus, MTU Typ 2, Deutz DQC111-05and Caterpillar ECF-1a and ECF-2. Approval according MB-Freigabe 228.3, Volvo VDS-3, MAN M3275, Mack EO-N and Renault VIRLD-2.
R-Favorit MF	SAE 15W-40	CI-4 / SL	E7, B4, A3	Maximum performance oil for diesel and gasoline engines. Meets i.a. the requirements of RenaultTruck RLD/RLD-2, Mack EO-M Plus, MTU type 2 and Caterpillar ECF-1a and ECF-2. Approval according MB-approval 228.3/ 229.1, Volvo VDS-3, MAN M3275, Mack EO-N, Renault VI RLD-2 and Cummins CES 20078.
R-Kamparol MF	SAE 10W-40	CI-4 / CF / SL	E7, B4, A3	High performance low friction oil for highest demands. Meets i.a.the requirements of MAN M3275, MB 2283, Volvo VDS-3, Deutz DQC 111-10 and Caterpillar ECF-1a and ECF-2.
R-Kamparol MF	SAE 15W-40	CI-4 / CF /SL	E7, B4, A3	High performance low friction oil for highest demands. Meets i.a. the requirements of MAN M3275, MB 2283 and Caterpillar ECF-1. Approval according Volvo VDS-3.
R-Primus GDx	SAE 15W-40	CG-4 / SJ	A2, B3, E2	High performance oil for diesel and gasoline engines. Meets i.a. the requirements of VW 501 01 / 505 00, Volvo VDS and MAN 271. Approval according MB-approval 229.1.

MULTIGRADE ENGINE OILS FOR COMMERCIAL VEHICLES

Product Designation		Performance level		Product description
		API	ACEA	
R-Favorit LSAP	SAE 10W-40	CI-4	E7, B4, A3	Semi-synthetic high performance low friction diesel oil. Due to reduced sulfur-, phosphor-and ash content suitable for exhaust aftertreatment systems (Euro V standard). Meets i.a.the requirements of MTU type 3.1, Renault RXD/RGD, Mack EO-M PI us. Deutz DQCIV-10 LA Volvo CN G and Scania LA. Approval according MAN M3477, MAN 3271-1,
R-Favorit MSAP	SAE 15W-40	CJ-4 / SM	E7, B4, A3	Ultra high performance low emissions heavy duty engine oil, recommended for four-stroke naturally aspirated, turbocharged, and supercharged diesel engines. Meets i.a. the requirements of MB 228.31, MAN 3275 / 3575, MTU type 2.1, DDC 93K218, Caterpillar ECF-3/ ECF-2 /ECF-1a, Cummins CES 20081. Approval accordmg Volvo VDS-4, Mack EO-O Premium Plus and Renault VI RLD-3.
R-Favorit MSAP	SAE 10W-40	CJ-4 / SM	E7, B4, A3	Ultra high performance low emissions heavy duty engine oil, recommended for four-stroke naturally aspirated, turbocharged, and supercharged diesel engines. Meets i.a. the requirements of MB 22831, MAN 3275/3575, MTU type 2I, DDC 93K218, Caterpillar ECF-3/ ECF-2 /ECF-1a, Cummins CES 20081 and JDQ-78X. Approval according Volvo VDS-4, Mack EO-O Premium Plus and Renault VI RLD-3.
R-Expert HX	SAE 10W-40	CI-4 / SL	E7, B4, A3	High performance UHPD low friction oil for Euro V commercial vehicle engines. Meets i.a. the requirements MTU Typ 3, Deutz DQC 11-10, Renault RXD, Cummings CES 20076, 20077, 20078, Caterpillar ECF 1-a and Scania LDF-Z Approval according MAN M3277 / M3377, MB-approval 228.5, Volvo VDS-3, Mack EON and Renault VI RU-2.
R-Expert UHPD	SAE 10W-40	CI-4 / SL	E7, B4, A3	High performance low friction oil UHPD for Euro V commercial vehicle engines. Meets i.a. the requirements of MTU Typ 3, Deutz DQC 111-10, Renault RXD, Cummings CES 20076, 20077, 20078, Caterpillar ECF 1-a, Scania LDF-2, MAN M3277 / M3377, MB 228.5, Volvo VDS-3, Mack EO-N and Renault VI RLD-2.



AUTOMOTIVE PRODUCTS

HYDRAULIC OILS



Product Designation	ISO-VG	Product description
R-Primo Hydralube HLP	10, 22, 32, 46, 68	Mineral oil-base hydraulic oil. Meets and exceeds the requirements of DIN 51 524 part 2 (HLP), ISO 6743/3 (HM) and AFNOR NF E48 602 (HM).
R-Primo Hydralube HLP-D	32, 46, 68	Cleaning active EP hydraulic oil for extreme operating conditions. Meets and exceeds the requirements of DIN 51 524 part 2 (HLP, deterging) and MAN-N 698.
R-Primo Hydralube HVLP	32, 46, 68	High-performance EP hydraulic oil with very good viscosity temperature characteristics. Meets and exceeds the requirements of DIN 51 524 part 3 (HVLP), ISO 6743/4 (HV) and AFNOR NF E 48 602 (HV).
R-Primo Hydralube Bio HEES	46	Readily biodegradable hydraulic oil HLP/HVLP on synthetic ester oil basis. Meets the minimum technical requirements for HEES oils of VDMA standard sheet 24 568 dated 03/1994 and the requirements placed on hydraulic oils HLP and HVLP of DIN 51 524 parts 2 & 3.

MACHINE OILS

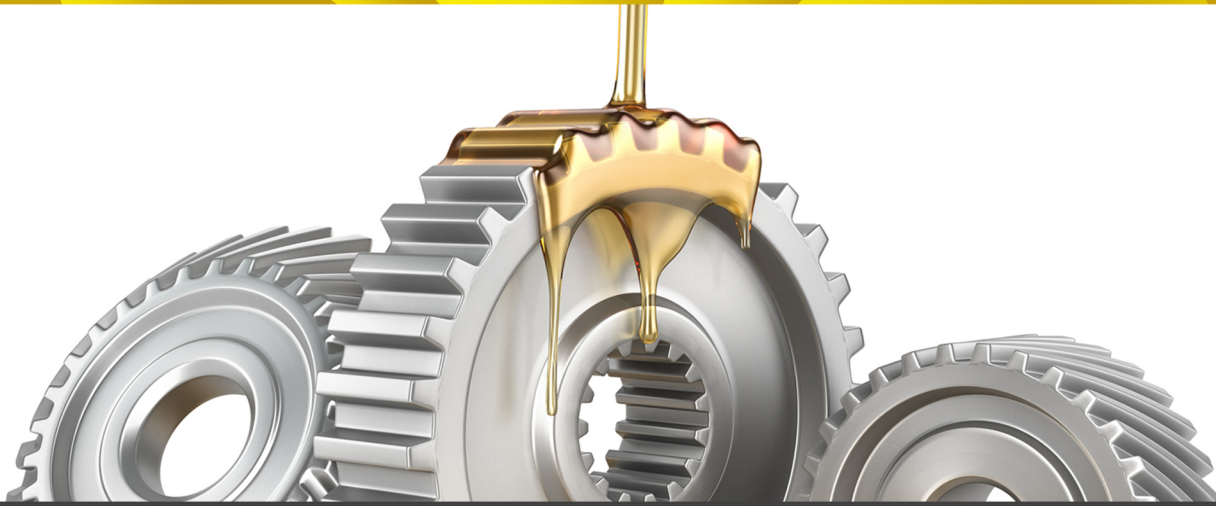
Product Designation	ISO-VG	Product description
R-Robotan MS	22	Non-additivated machine and cutting oil for light cutting work (copper, brass).
R-Robotan MR	22, 32, 46, 68, 100, 150, 220	Paraffinic machine oil without additives according DIN 51 501 (L-AN).

SAW FRAME OILS

Product Designation	ISO-VG	Product description
R-Saw Fram Oil	220, 320, 460, 680	Adhesive oil on the basis of selected mineral oils for high load applications. Fulfills and exceeds the requirements according DIN 51517, part 3 (CLP).

GAS ENGINE OILS

Product Designation	ISO-VG	API	Product description
NEW R-=Gasmotorenöl Plus	40	CF	Middle ash gas motor oil, especially for 4-stroke gas motors. Best suitable for turbocharged, naturally aspirated rich and lean burn gas engines. Meets the requirements of MWM Deutz, MAN, Caterpillar, Jenbacher and Wärtsila.



INDUSTRIAL PRODUCTS

TURBINE OILS

Product Designation	ISO-VG	Product description
R-Turbinol LTD	32, 46	32, 46 For lubricating and cooling the bearings as well as pressure transfer medium for power control systems in steam and water turbines and turbo compressors. Meets the requirements of DIN 51 515 Teil 1, DIN 51524 Teil 1, AFNOR E46-800 HL, MIL-H-17672D, Cincinnati Machine P-38/-45/-54/-55/-57/-62, U.S. Steel 126 and Siemens TLV 9013 04.

HEAT TRANSFER OILS

Product Designation	ISO-VG	Product description
R-Thermocur	32, 46	Heat transfer oil of low vapor pressure, high heat capacity and excellent thermic and oxidative stability. For indirect heating in industry and shipping. Meets the requirements placed on heat transfer media Q of DIN 51 522.

SLIDEWAY OILS

Product Designation	ISO-VG	Product description
R-Adhesol SW	68, 220	For lubricating the slide ways on machine tools, of gear units and all kinds of advance devices. For hydraulic systems of all kinds of pumps and engines. Recommended for use in central lubricating systems. Meets the requirements of DIN 51 524 part 2 (HLP) and DIN 51 517 part 3 (CLP), classification of DIN 51 502 in the type of material lubricant oil CGLP.

INDUSTRIAL GEAR OILS

Product Designation	ISO-VG	Product description
R-Adhesol SW	32, 46, 68, 100, 150, 220, 320, 460	EP gear and circulating oil for use in heavily loaded industrial gears and for use at high sliding speeds and roller pressings. Meets and exceeds the requirements of DIN 51 517 part 3 (CLP).



CHAIN SAW OILS

Product Designation	ISO-VG	Product description
R-Silvacur K 100	100	Mineral chain saw oil with high oil film stability and excellent corrosion protection, especially for saw chains of motor chain saws; can also be used as adhesive oil for low loaded lubricating points.

GREASES

Product Designation	ISO-VG	Product description
R-Mehrzweckfett K2K-30 [multipurpose grease]	K2K-30	Lubricating grease DIN 51 825- K2K-30, consistency class NLGI 2. Lithium grease for normally loaded rolling and plain bearings. Operating temperature range: -30 to +130°C.
R-EP-Langzeitfett KP2K-30 [longlife grease]	KP2K-30	Lubricating grease DIN 51 825- KP2K-30, consistency class NLGI 2. Lithium grease for highly loaded rolling and plain bearings as well as for sliding surfaces with high compression stress. Operating temperature range: -30 to +130°C.
R-Mehrzweckfett (Grafit) KF2K-30 [multipurpose grease]	KF2K-30	Lubricating grease DIN 51 825- KP2K-30, consistency class NLGI 2. Graphite containing lithium grease for normally loaded rolling and plain bearings as well as for sliding surfaces. Operating temperature range: -30 to +130°C.
R-Mehrzweckfett (MoS ₂) KPF2K-30 [multipurpose grease]	KPF2K-30	Lubricatinggrease DIN 51 825- KPF2K-30, consistencyclass NLGI 2. Lithium grease (MoS ₂) for highly loaded rolling and plain bearings with normal or high speed, as well as for sliding surfaces with high compression stress. Operating temperaturerange: -30 to +130°C.
R-Spezial-Fliessfett ZSA MP00G-40 [fluid grease]	MP00G-40	Lubricating grease DIN 51 502- MP00G-40, consistency class NLGI 00. Lithium fluid grease on the basis of mineral base oils for closed gears which require grease lubrication. Operating temperature range: -40 to +100°C.
R-Spezial-Fliessfett ZSA KHCP00G-40 [fluid grease]	KHCP00G-40	Lubricating grease DIN 51502 and DIN 51 825- KHCP00G-40, consistency class NLGI 00. Lithium fluid grease on the basis of synthetic base oils for closed gears which require grease lubrication. Operating temperature range: -40 to +100°C.
R-LKW EP- Radlagerfett KP2N-30 [wheel bearing grease]	KP2N-30	Lubricating grease DIN 51502 - KP2N-30, consistency class NLGI 2. Lithium complex grease for highly loaded rolling and plain bearings at high temperatures, short-term up to 220°C. Operating temperature range: -30 to +140°C.

ANTI FREEZES

Product Designation	Product description
R-Antifreeze GW-11 Concentrate	Concentrated antifreeze for water-cooled combustion engines. Also suitable for aluminum engines. Protects the radiator against rust, corrosion and calcification and, depending on the concentration used, ensures frost protection down to -40°C. Corresponds to the specifications of BMW, Fiat Ford, General Motors, Mercedes- Benz, Peugeot.
R-Antifreeze GW-11 -40° C	Prediluted antifreeze for water-cooled combustion engines. Also suitable for aluminum engines. Protects the radiator against rust, corrosion and calcification and ensures frost protection down to -40°C. Meets the specifications of BMW, Fiat Ford, General Motors, Mercedes-Benz, Peugeot.
R-Antifreeze GW-12 Concentrate	Silicate-free concentrated antifreeze for water-cooled combustion engines. Also suitable for aluminum engines. Protects the radiator against rust, corrosion and calcification and, depending on the concentration used, ensures frost protection down to -40°C. Compatible with all branded products (abo VW G11). Qualifications: VW TL 774-D/F (G12+), MB 3253, Ford WSS-M 97B44-D, Audi, SEAT, SKODA TL 774-D/F, MAN 324 SNF, MTU MTL 5048.
R-Antifreeze GW-12 -40° C	Prediluted silicate-free antifreeze for water-cooled combustion engines. Abo suitable for aluminum engines. Protects the radiator against rust, corrosion and calcification and ensures frost protection down to -40°C Compatible with all branded products (abo VW G11). Qualifications: VW TL 774-D/F (G12+), MB 325.3, Ford WSS-M 97B44-D, Audi, SEAT, SKODATL 774-D/F, MAN 324 SNF, MTU MTL 5048.
R-Antifreeze GW-13 -40° C	Prediluted silicate-free antifreeze for water-cooled combustion engines. Abo suitable for aluminum engines. Protects the radiator against rust corrosion and calcification and ensures frost protection down to -40°C Compatible with all branded products (abo VW G11). Qualifications: VW TL 774-D/F (G12+), MB 325.3, Ford WSS-M 97B44-D, Audi, SEAT, SKODATL 774-D/F, MAN 324SNF, MTU MTL 5048.



SPECIALITIES

MAINTENANCE COMPOUNDS & CLEANERS

Product Designation	Product description
R-Insektenentferner [insect remover]	Liquid alkaline cleaning concentrate for the removal of insects.
R-Felgenreiniger [wheel rims cleaner]	Liquid, stable-foam alkaline agent to clean and to maintain wheel rims, especially such of aluminium.
R-Fahrzeugreiniger [vehicle cleaner, in- & outside]	Liquid alkaline cleaner which provides brilliance on metallic and coated surfaces of vehicles.
R-Cockpitspray [cockpit spray]	Cleaning agent for plastic door linings and dashboards.
R-Rostlöser mit MoS ₂ [rust remover spray with MoS ₂]	Efficient agent for rust removal. Prevents corrosion.
R-Bremsenreinigerspray [brake cleaner spray]	Spray for disc brakes, hydraulic parts and other soiled metallic materials.
R-Silikonspray [silicone spray]	Water-repellent, silicic lubricant which may be used to lubricate the materials metal, rubber and plastic
R-Motorreinigerspray [motor cleaner spray]	Cleaner spray removes oil, grease and other contaminations from blocks, machines and tools.

BRAKE FLUID

Product Designation	Product description
R-Brake Fluid DOT 4	High performance brake fluid, which is designed to meet the requirements of modern motor car brake systems DOT 3 / DOT 4 with disc- and drum brakes. According FMVSS 116, SAE J 1703/J 1704 and ISO 4925 class4..



ROYAL OIL

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