

## RAVEDOL

Ravensberger Schmierstoffvertrieb GmbH develops, produces and markets user-oriented lubricants that set trends — technologically, economically and ecologically.

Today, RAVENOL products are available worldwide in over 80 countries.

Our customers come from many industries such as the automotive, mechanical engineering, steel, construction, mining and agriculture industries.

RAVENOL products are reviewed and tested continuously in our state-of-the-art laboratory. As a result of a strict quality assurance system, we guarantee you that our products are of a consistently high quality. A continuous quality inspection process as part of internal operating procedures provides both you and us with additional assurance. The products are monitored by the quality management system, from receiving raw materials to delivery of the retail containers to the customer.

In order to live up to the standards of an increasingly global competition, Ravensberger Schmierstoffvertrieb GmbH is certified under DIN EN ISO DIN 9001. Since 2012 the stringent quality management requirements of the automotive industry are fulfilled with the certification under ISO/TS 16949. Our laboratory is also accredited according to DIN EN ISO/IEC 17025. The work spectrum ranges from developing innovative products together with our powerful partners, right through to constantly optimising appropriate inspection methods. The laboratory's regular and successful participation in national and international interlaboratory tests relating to our analytical tasks is matter of course for us. Our high quality standard is verified and confirmed by annual surveillance audits by external independent companies.

We have clearances for our products in the automotive industry from major engine manufacturers such as Daimler, Chrysler, VW, GM, OPEL, BMW, Porsche, MAN, Volvo, MTU, Deutz, ZF, Steyr Motors, Cummins and JASO. Meeting the highest specifications is a matter of course in our products. Our products are listed by the API and NMMA. We have FIA-CIK homologation for our 2-stroke racing oils.

The technical competence of Ravensberger Schmierstoffvertrieb GmbH is demonstrated by its global commitment to motorsport, where RAVENOL products stand their test under extreme loads. RAVENOL is active in international racing and is now represented as a partner of drivers, teams and race series in formula, sports and touring car racing, right through to long-distance racing. RAVENOL is also a reliable partner in motorcycle racing and in the maritime sector.

In addition, continuous modernisation is ensured in all areas of business based on consistent investment.

The Ravensberger Schmierstoffvertrieb GmbH products are supported by a strong team which guarantees proximity to customers and the market thanks to its professionalism and experience.

Observing trends in the markets as well as the individual needs of our customers takes top priority for us.

So that we can continue to be a reliable partner for you in the future and to ensure competitiveness in the long term, RAVENOL now also visually stands for innovative, modern and high-quality products made in Germany.



## ...WITH RAVENOL'S INNOVATIVE PACKAGING AND DESIGNS









NGINE OILS FOR PASSENGER CARS CleanSynto®								
Product name		lassification		Description / Features				
RAVENOL Extra Fuel Economy EFE Art. 1111103	SAE 0W-16	SN	ACEA	Fully synthetic low friction motor oil with CleanSynto® technology for passenger car petrol and diesel engines with and without turbo-charging and direct injection.				
				Honda 08215-99974, 08216-99974, 08232-P9951LHE, Honda Ultra Next, Ultra Green, Hybrid Engine, Nissan KLANM-01A04 Extra Save X Eco, Mitsubishi MZ102661, MZ102662, Mitsubishi DiaQueen ECO Plus, Toyota 08880-11005				
RAVENOL High Fuel Economy HFE Art. 1111104	5W-16	SN		Fully synthetic low friction motor oil with CleanSynto® technology for passenger car petrol and diesel engines with and without turbo-charging and direct injection.				
				Honda 08215-99974, 08216-99974, 08232-P99S1LHE, Honda Ultra Next, Ultra Green, Hybrid Engine, Nissan KLANM-01A04 Extra Save X Eco, Mitsubishi MZ102661, MZ102662, Mitsubishi DiaQueen ECO Plus, Toyota 08880-11005				
RAVENOL Eco Synth ECS Art. 1111102	0W-20	SN(RC)/ SM(EC)	A5/B5	Fully synthetic low friction motor oil with CleanSynto® technology for passenger car petrol and diesel engines with and without turbo-charging and direct injection.				
				ILSAC GF-5, Resource Conserving, Energy Conserving				
RAVENOL SSO Art. 1111100	0W-30	SN/CF	A3/B4	Fully synthetic low friction motor oil with CleanSynto® technology for passenger car petrol and diesel engines with and without turbo-charging and direct injection.				
				MB 229.5, VW 502 00/ 503 01(Audi)/ 505 00, BMW Longlife-01, BMW Longlife-98, GM-LL-A-025, GM-LL-B-025, Renault RN0700 / RN0710				
RAVENOL Arctic Low SAPS ALS Art. 1111137	0W-30		C3	Fully synthetic, fuel economy low friction motor oil with CleanSynto® Technology for petrol and diesel engines of high performance vehicles and vans with Diesel Particular Filter DPF and Three-Way Catalyst, which require HTHS >3,5 mPa*s				
				MB 229.51, BMW Longlife-04				
RAVENOL Super Synthetic Hydrocrack SSH Art. 1111138	0W-30	SM	A3/B4	Fully synthetic low friction motor oil with CleanSynto® technology for passenger car petrol and diesel engines with and without turbo-charging and direct injection. Minimises friction, wear and fuel consumption with excellent cold start characteristics. Suitable for extended oil change intervals where recommended by manufacturer.				
				MB 229.3, VW 502 00 / 505 00, BMW Longlife-98, Renault RN0710				
RAVENOL Super Synthetik Öl SSL Art. 1111108	0W-40	SN/CF	A3/B4	Fully synthetic low friction motor oil with CleanSynto® technology for passenger car and van petrol and diesel engines with and without turbo-charging and direct injection.				
				MB 229.3, MB 229.5, VW 502 00 / 505 00, BMW Longlife-01, Porsche A40, Renault RN0700 / RN0710				

SN(RC)/ SM(EC)

5W-20

RAVENOL Super Fuel Economy SFE Art. 1111110

Product name	Cl	assification	15	Description / Features
Product name	SAE	API	ACEA	Description / reatures
RAVENOL WIV Art. 1111101	0W-30		A5/B5	Fully synthetic low friction motor oil with CleanSynto® technology for VW and Audi petrol and diesel engines with pump-injection and extended service intervals (Longlife II).
			10/04	VW 503 00 / 506 00 / 506 01
RAVENOL WIV III Art. 1111120	5W-30		A3/B4	Fully synthetic low friction motor oil with CleanSynto® technology, which combines the high standard for petrol and diesel engines. Extended service intervals (Longlife III).
				VW 504 00 / 507 00 (for Europe and Northamerica), Porsche C30 (Cayenne V6 except China and Cayenne Diesel)
RAVENOL FO Art. 11111115	5W-30	SN(RC)/ SM(EC)/ SL(EC)	A5/B5	Fully synthetic low friction motor oil with CleanSynto® technology for passenger car petrol and diesel engines with and without turbocharging and direct injection.
				ILSAC GF-5, Ford WSS-M2C913-A/B, Jaguar WSS- M2C913-B, MAZDA
RAVENOL FEL Art. 1111123	5W-30	SN/ SM(EC)/CF	A5/B5, C2	Fully synthetic low friction motor oil with CleanSynto® technology for passenger car petrol and diesel engines (including DPF and TCW). Extended oil change intervals. Meets EURO IV and EURO V standard for emission reduction. HTHS >2,9 mPa*s(cP).
				JASO DL-1 (D049RAV111), Ford WSS-M2C913D, Ford WSS-M2C934-A/C, ILSAC GF-4, PSA B71 2290
RAVENOL FDS Art. 1111139	5W-30	SL/CF	A1/B1, A5/ B5	Fully synthetic, low friction motor oil with CleanSynto® Technology for petrol and diesel passenger cars with and without turbocharging and direct injection.
				Renault RN0700, FORD WSS-M2C913-D
RAVENOL HDS Hydrocrack Diesel Specific Art. 1111121	5W-30	SM(EC)	C4	Fully synthetic low friction mid SAPS motor oil with CleanSynto® technology for passenger car diesel engines (including DPF and TCW). Extended oil change intervals. Meets EURO IV and EURO V standard for emission reduction. HTHS >3,5 mPa*s(cP).
				Energy Conserving, Renault RN0720
RAVENOL HPS Art. 1111117	5W-30	SN(RC)/ SM(EC)/ SL/CF	A3/B4	Semi-synthetic low friction motor oil with CleanSynto® technology with polyalphaolefin for passenger car petrol and diesel engines with and without turbo-charging and direct injection.
				ILSAC GF-5, Resource Conserving, Energy Conserving, MB 229.3, BMW Longlife-98, VW 502 00 / 505 00, Porsche C30
RAVENOL HCL Art. 11111118	5W-30	SL/ CF	A3/B4	Fully synthetic low friction motor oil with CleanSynto® technology for passenger car and van petrol and diesel engines with and without turbo-charging and direct injection.
				MB 229.5, BMW Longlife-01, VW 502 00 / 505 00 / 501 01
RAVENOL HLS Art. 1111119	5W-30	SM(EC)/ SL/CF	A3/B4, C3	Fully synthetic low friction motor oil with CleanSynto® technology for passenger car petrol and diesel engines (including DPF and TCW). Extended oil change intervals.
				ILSAC GF-4, Energy Conserving, MB 229.51, MB 229.31, BMW Longlife-04, VW 502 00 / 505 00 / 505 01, GM dexos2, GMW 16177
RAVENOL DXG Art. 1111124	5W-30	SN(RC)/ SM(EC)		Fully synthetic low friction motor oil with CleanSynto® technology for passenger car petrol engines with and without turbo-charging and direct injection.
				ILSAC GF-5, Resource Conserving, Energy Conserving, GM dexos1

Fully synthetic low friction low SAPS motor oil with CleanSynto® technology for passenger car petrol and diesel engines with and without turbo-charging and direct injection.

ILSAC GF-5, FORD WSS-M2C930-A/B, FORD WSS-M2C948-B, MAZDA, DaimlerChrysler MS-6395, HONDA, Nissan, Mitsubishi DiaQueen

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Product name	SAE	API	ACEA	Description / Features
RAVENOL Longlife LSG Art. 1111116	5W-30	SM/CF	A3/B4-07, C3-08	Fully synthetic low friction motor oil with CleanSynto® technology for passenger car petrol and diesel engines with and without turbo-charging and direct injection.  First- and Service Fill for gasoline and diesel engines: Opel GM-LL-A-025 (B-040-2095),
				Opel GM-LL-B-025 (B-040-2098), GM dexos2
RAVENOL VMP Art. 1111122	5W-30	SM(EC)	A3/B4, C3	Fully synthetic low friction motor oil with CleanSynto® technology for passenger car petrol and diesel engines (including DPF and TCW). Extended oil change intervals. Meets EURO IV and EURO V standard for emission reduction. Multioil.
				BMW Longlife-04, VW 504 00 / 507 00 (for Europa and North America), MB 229.51, MB 229.31, Porsche C30 (Cayenne V6 (except China) and Cayenne Diesel), Fiat 9.55535-S1, Audi/Volkswagen G 052 195 M2, G 052 195 M4, G 052 195 M6, BMW 83 21 0 398 507, BMW/Mini 83 21 0 398 508, Mercedes Benz 000 989 89 01 10
RAVENOL VSI Art. 1111130	5W-40	SM/SL/CF	A3/B4	Fully synthetic low friction motor oil with CleanSynto® technology for passenger car petrol and diesel engines with and without turbo-charging and direct injection.
				MB 229.3, VW 502 00 / 505 00, BMW Longlife-98, Porsche A40 (except Cayenne V6), Opel GM-LL-B-025
RAVENOL VPD Art. 1111131	5W-40	SM/CF	A3/B4, C3	Fully synthetic low SAPS motor oil with CleanSynto® technology for diesel engines with pump-injection with and without turbo- charging and direct injection.
				VW 502 00 / 505 00 / 505 01, MB 229.51, Ford WSS M2C 917-A, BMW Longlife-04, Porsche
RAVENOL VDL Art. 1111132	5W-40	CF	B3/B4	Fully synthetic low friction motor oil with CleanSynto® technology for passenger car diesel engines with and without turbo-charging and direct injection.
				MB 229.3, BMW Longlife-98, VW 505 00, Opel GM-LL-B-025, TOYOTA Common Rail, MITSUBISHI, NISSAN
RAVENOL VMO Art. 1111133	5W-40	SN/SM/CF	A3/B4, C3	Fully synthetic low friction motor oil with CleanSynto® technology for passenger car petrol and diesel engines (including pump-injection technology, DPF and TCW). Extended oil change intervals. Meets EURO IV and EURO V standard for emission reduction. Multioil.
				MB 229.31, VW 502 00 / 505 00 / 505 01, BMW Longlife-04, Porsche A40, Ford WSS- M2C 917-A, Fiat 9.55535-S2
RAVENOL VollSynth Turbo VST Art. 1111136	5W-40	SN/CF	A3/B4	Fully synthetic low friction motor oil with CleanSynto® technology for passenger car petrol and diesel engines with and without turbo-charging and direct injection. Minimises friction, wear and fuel consumption with excellent cold start characteristics. Extended oil change intervals according to manufacturers recommendation.
				MB 229.5, Porsche A40, VW 502 00 / 505 00, BMW Longlife-01, Opel GM-LL-B-025, Renault RN0700 / RN0710
RAVENOL HCS Art. 1112105	5W-40	SM/SL/CF	A3/B4	Synthetic low friction motor oil with CleanSynto® technology for passenger car gasoline and diesel engines with and without turbo-charging and direct injection.
				MB 229.3, VW 502 00 / 505 00, BMW Longlife-98, Renault RN0700 / RN0710, Opel GM-LL-B-025, Porsche

## ENGINE OILS FOR PASSENGER CARS CleanSynto®

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Product name	SAE	API	ACEA	Description / Features
RAVENOL TSJ Art. 1112106	10W-30	SN(RC), SM(EC)	A3/B4	Semi-synthetic multigrade with CleanSynto® technology for year round use in gasoline and diesel engines under all operating conditions. Especially for modern Japanese and Asian cars.
				ILSAC GF-5, Resource Conserving, Energy Conserving, Toyota, Nissan, Honda, Mitsubishi, Mazda, Suzuki, Isuzu, Subaru, Daihatsu, KIA, Hyundai, SsangYong, Daewoo
RAVENOL TSi Art. 1112110	10W-40	SN, SM/CF	A3/B4	Semi-synthetic low friction motor oil with CleanSynto® technology for passenger car petrol and diesel engines with and without turbocharging and direct injection.
				MB 229.1, BMW Special Oil, VW 501 00 / 505 00, VW 502 00 / 500 00
RAVENOL DLO Art. 1112111	10W-40	CF	B4-02	Semi-synthetic low friction motor oil with CleanSynto® technology for passenger car diesel engines with and without turbo-charging and direct injection.
				MB 229.1, BMW Special Oil, VW 500 00 / 501 01 / 505 00, Porsche
RAVENOL LLO Art. 1112112	10W-40	SL(EC)/CF	A3/B3/B4	Semi-synthetic low friction motor oil with CleanSynto® technology for passenger car petrol and diesel engines with and without turbocharging and direct injection.
				MB 229.1, BMW Special Oil, VW 500 00 / 505 00



## **E**NGINE OILS

	Classifications			
Product name	SAE	API	ACEA	Description / Features
RAVENOL Formel Standard	10W-30	SF/CD	A2/B2	Mineral multigrade motor oil used in petrol and diesel engines with and without turbo charging in passenger cars and trucks.
Art. 1113110				MB 227.1, MIL-L-46152 B, MIL-L-2104 D, CCMC G4
RAVENOL Turbo-C HD-C Art. 1113103	15W-40	CF-4/ CF/SL	A3/B4, E2	Mineral multigrade motor oil used in petrol and diesel engines with and without turbo charging in passenger cars and trucks. Extended oil change intervals until 45.000 km.
				MB 228.3, MB 229.1, MAN 271, ZF TE-ML 07C, VW 505 00, Allison C4, Caterpillar TO-2, Volvo VDS, MACK EO-L, MTU Typ 2
RAVENOL Formel Super	15W-40	SF/CD	A2/B2	Mineral multigrade motor oil used in petrol and diesel engines with and without turbo charging in passenger cars and trucks.
Art. 1113115				MB 227.1, MIL-L-46152 B, MIL-L-2104 D, CCMC G4
RAVENOL Formel Extra	20W-50	SF/CD	A2/B2	Mineral multigrade motor oil used in petrol and diesel engines with and without turbo charging in passenger cars and trucks.
Art. 1113120				MB 227.1, MIL-L-46152 B, MIL-L-2104 D, CCMC G4
RAVENOL Turbo Extra	20W-50	SL/CF	A3/B4, E2	Mineral multigrade motor oil used in petrol and diesel engines with and without turbo charging in passenger cars.
Art. 1113125				MB 228.1, MB 229.1, VW 505 00, Volvo VDS, MAN 271, MTU
RAVENOL Super HD Art. 1113300	30	SF/CD		Mineral monograde motor oil used in petrol and diesel engines with and without turbo charging in passenger car petrol and diesel engines, trucks and stationary plants.
				MIL-L-46152 B, MIL-L-2104 D, MB 227.0, CCMC G4
RAVENOL Super HD Art. 1113305	50	SF/CD		Mineral monograde motor oil used in petrol and diesel engines with and without turbo charging in passenger car petrol and diesel engines, trucks and stationary plants.
				CCMC G2/D1, MIL-L-46152 B/C, Ford ESE-M2C 153C, Ford SMM-2C 9011A, GM 6085M

## HIGH MILEAGE

	Cla	ssificatio	ons	
Product name	SAE	API	ACEA	Description / Features
RAVENOL SVE Standard Viscosity Ester Oil	5W-30	SL/ CF	A3/B4	Semi-synthetic low friction multigrade engine oil for vehicles with petrol and diesel engines with or without turbocharging and high mileage.
Art. 1116101				MB 229.5, BMW Longlife-01, VW 502 00 / 505 00 / 501 01
RAVENOL SVS Standard ViscositySynto Oil	5W-40	SN/CF	A3/B4	Fully synthetic low friction multigrade engine oil for vehicles with petrol and diesel engines with or without turbocharging and high mileage.
Art. 1115100				MB 229.5, Porsche A40, VW 502 00 / 505 00, BMW Longlife-01, Opel GM-LL-B-025, Renault RN0700 / RN0711
RAVENOL HVT High Viscosity Turbo Oil Art. 1116102	5W-50	SN/CF	A3/B4	Fully synthetic high performance low friction engine oil for verhicles with petrol and diesel engine with or without turbocharging and direct injection and high mileage. Minimization of friction, wear and fuel consumption.
				MB 229.1
RAVENOL SVT Standard Viscosity Turbo Oil	10W-40	SN/CF	A3/B4	Semi synthetic low friction multigrade engine oil for vehicles with petrol and diesel engines with or without turbocharging and high mileage.
Art. 1116103				MB 229.1, BMW Special Oil, VW 501 00 / 505 00, VW 502 00 / 500 00
RAVENOL HVE High Viscosity Ester Oil Art. 1115101	10W-50	SN/CF	A3/B4	Fully synthetic high performance low friction engine oil for verhicles with petrol and diesel engine with or without turbocharging and direct injection and high mileage. Minimization of friction, wear and fuel consumption.
				MB 229.1
RAVENOL HVS High Viscosity Synto Oil Art. 1115102	10W-60	SN/CF	A3/B4	Fully synthetic high performance low friction engine oil for verhicles with petrol and diesel engine with or without turbocharging and direct injection and high mileage. Minimization of friction, wear and fuel consumption.
				MB 229.1
RAVENOL SVP Standard	15W-40	SJ/CF	A3/B4	Mineral multigrade engine oil for vehicles with petrol and diesel engines with or without turbocharging and high mileage.
Viscosity Performance Oil Art. 1117100				MB 229.1, MAN 271, ZF TE-ML 07C, VW 505 00
RAVENOL HVP High Viscosity Performance Oil Art. 1116104	15W-50	SN/CF	A3/B4	Mineral high performance low friction engine oil for verhicles with petrol and diesel engine with or without turbocharging and direct injection and high mileage. Minimization of friction, wear and fuel consumption.
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## $R_{\text{ALLYE-}}$ $R_{\text{ACING MOTOR OILS}}$

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Product name	SAE	API	ACEA	Description / Features
RAVENOL RCS Racing Competition Synto Art. 1141090	5W-40	SM/CF	A3/B4	High performance fully synthetic engine oil especially developed to maximise power release whilst giving ultimate protection in both race, rallye and Off-Road applications. Use as an upgrade where an SAE 5W-30 was originally specified by the vehicle manufacturer.
RAVENOL RRS Racing Rally Synto Art. 1142100	5W-50	SN/CF	A3/B4	Semi-synthetic multigrade engine oil based on the highest quality Ester and Poly-Alpha Olefin technology. Specially formulated for use in competition and motorsport engines operating in the most operating conditions.  MB 229.1
RAVENOL RSE Racing Sport Ester Art. 1141105	10W-50	SN/CF	A3/B4	Fully synthetic multigrade engine oil based on the highest quality Ester and Poly-Alpha Olefin technology. Specially formulated for use in competition engines using low friction technology but providing a better viscosity at high operating temperatures.
				MB 229.1
RAVENOL RSS Racing Sport Synto Art. 1141100	10W-60	SN/CF	A3/B4	Fully synthetic multigrade engine oil based on the highest quality Ester and Poly-Alpha Olefin technology. Recommended for all Motorsport applications requiring a thicker grade of oil. Uses latest low friction technology to ensure maximum release of power.  MB 229.1
RAVENOL RFS Racing Formel Sport Art. 1142105	15W-50	SN/CF	A3/B4	Semi-synthetic multigrade engine oil based on the highest quality Ester and Poly-Alpha Olefin technology. Specially formulated for use in Motorsport applications providing maximum release of power with ultimate engine protection.
				MB 229.1
RAVENOL Racing Kart 2T Art. 1144100				Fully synthetic, no-compromise two-stroke racing oil which carries full FIA-CIK Homologation and Approval. Based on wide experience in karting, road racing and motocross, it has been developed and tested worldwide under the harshest conditions, including on Grand Prix circuits.
				FIA-CIK Homologation
RAVENOL Racing Castor 2T Art. 1144101				Two-stroke Kart oil with castor technology and ester synthetic additives for 2-stroke engines with methanol and ethanol as fuel, e.g. Kart engines and Speedway engines. Miscible with petrol, methanol and ethanol. Do not mix with mineral and synthetic two-stroke motor oils. Recommended mixing ratio 20:1.
				FIA-CIK Homologation
RAVENOL Racing Gear Oil Art. 1221111		GL-5 + LS		A fully synthetic transmission oil especially developed for and approved by Drexler transmissions in Germany. Ideal for highly stressed differentials. Reduces foaming, increases thermal stability and provides ultimate wear protection.
				Drexler limited slip differential (Lamellen-Selbstsperrdifferential) in BMW Alpina B5, B6, GT3, GT4, M3, Z4 and World Touring Car Championship (WTCC), Chrysler Viper GT3, Corvette Z06, Fiat Abarth, Lamborghini Murcielago, Mercedes AMG C 63, CLS 63, E 63, SL 63, SLS
RAVENOL RHP Racing High Performance Gear Art. 1145100	75W-90	GL-4/ GL-5		Fully synthetic transmission oil especially developed for both synchro and dog engagement gearboxes in motorsport. It provides outstanding wear protection and thermal stability. Especially suitable for front wheel drive applications.
RAVENOL Racing Brake Fluid R 325+				Very heavy-duty high-performance brake fluid with a very high wet boiling point especially developed for Motorsport (cars and motorcycles) and similar high temperature applications.
Art. 1350604				FMVSS No. 116 DOT 4, ISO 4925

## Natural gas engine oils

Product name	Classifications			Description / Features	
Product name	SAE	API	ACEA	Description / reatures	
RAVENOL TEG	10W-40	SL/CF	A3/B3	Semi synthetic high alloyed motor oil for natural gas engines.	
Gasmotorenöl Art. 1132100				Natural gas engines	
RAVENOL MGS Gasmotorenöl	15W-40	CF-4/ SJ	A3/ B4,	High performance mineral multi grade motor oil used in natural gas engines.	
Art. 1133100			E2	MAN 3271-1 (vehicle engines), Renault RGD, MB 226.9, TEDOM Group 1P (61-0-0281.2), Volvo CNG	
RAVENOL Gasmotorenöl	40			Mineral motor oil for lubrication of 4-stroke natural gas engines for gases with low sulfur content.	
Art. 1133105				Application for natural gas, biogas and sewage gas.	

## ATF — TRANSMISSION FLUIDS FOR AUTOMATIC TRANSMISSIONS -PROFESSIONAL LINE-

Product name	Description / Features								
RAVENOL	Synthetic ATF for 5-speed Mercedes-Benz automatic transmission.								
ATF M 6-Serie Art. 1212105	MB 236.10 (A 001 989 21 03), Chrysler 52107891AA								
RAVENOL	Synthetic ATF for 7-speed Mercedes-Benz automatic transmission (NAG2VSport).								
ATF M 9-Serie Art. 1211108	MB 236.14 (001 989 68 03 10), MB 236.12, MB 236.10								
RAVENOL	Synthetic ATF for 7-speed ATF 7G-Tronic with ECO Stop-Start function of Mercedes-Benz (NAG2FE+).								
ATF M 9-FE Serie Art. 1211127	MB 236.15, MB A 001 989 78 03, MB A 001 989 77 03, ATF 7134FE, ATF 134FE, ATF 134ME								
RAVENOL ATF 5/4 HP Fluid	Fully synthetic universal ATF (Automatic-Transmission-Fluid) for ZF automatic transmission (4HP and 5HP).								
Art. 1212104	Alfa Romeo 20HP 14891900, ATF LT 71141, ATF LA 2634, BMW 8322 9407765, BMW 8322 9407807, Citroën/Peugeot AL4 PR 9736.22, Jaguar JLM 20237, Land Rover STC4863, Mercedes A 0019892203, Porsche 999.917.547.00, Renault DPO, VW/Audi G052162 A1/A2/A6, VW TL 52 162, ZF S671 090 170								
RAVENOL ATF 6HP Fluid Art. 1211112	Synthetic ATF for ZF 6HP speed boxes. Backwards compatible for ZF 4- and 5-stroke passenger car ATF except 6HP26A61 in vehicles with AUDI W12 (only original VW G055162A2 blue) and of 6HP19X for AUDI Q7, 6HP19A, 6HP28AF (only original VW G060162A2 green).								
	ZF 6HP19, 6HP21, 6HP26, 6HP28, 6HP32, 6HP34, BMW 83220144137, ATF M1375.4, 83220142516, 83222305396 (ATF2), FORD MERCON SP XT-6-QSP (6R60, 6R75, 6R80), Jaguar C2C 8432, Land Rover TYK50 0050, VW/AUDI G 055005 A1/A2/A6, ZF S671 090 252/3/5								
RAVENOL ATF 8HP Fluid	Synthetic ATF for 8HP-series transmission of ZF and 6-speed automatic transmissions of 6HP-series for AUDI Q7.								
Art. 1211124	BMW 83222305397 (until 02.2013 83222152426), ATF L 12108, VW/AUDI G 060162 A1/A2/A6, ZF TE-ML ZF S671 090 312, ZF TE-ML 11 9HP48, Land Rover LR023288 and LR023289, ZF TE-ML 11 9HP48								
RAVENOL	Fully synthetic gear lubricant for the latest generation of electronically controlled active transfer box.								
Transfer Fluid TF- 0870 Art. 1211128	BMW 83220397244 for Transfer Case xDrive: ATC300, ATC350, ATC400, ATC450, ATC500, ATC700, Land Rover IYK500010, ATF TF-0753, Nissan 999MP-TF0870P, KLD22-00001EU for Transfer Case ATX90A, Porsche 000-043-301-36 / 00004330136 for Cayenne Transfer Case, VW G052515A2 for Transfer Case 0AD and 0BV for Touareg, Q7, VW G052533A2 for Transfer Case 0C7 for Amarok								
RAVENOL T-IV-Fluid	Universal ATF (Automatic-Transmission-Fluid) for TOYOTA and AISIN AW automatic transmission.								
Art. 1212102	Aisin Warner Automatic Gearbox, BMW 83 22 7 542 290 for MINI 6-Speed Aisin F21, 83 22 0 402 413 for MINI 6-Speed Aisin F21 (nur USA), FORD 1327936, WSS-M2C924-A, XT-8QAW, General Motors 9986195, OPEL/GM 1940771,1940774, Land Rover LR002748 6-Speed Aisin F21, RENAULT 7711218368 SU1 Gear, 7711172225 for transmission SU0 and SU1, TOYOTA JWS 3309, 08886-81016, 00279-000T4, 08886-01705, VOLVO 1161540, VW/AUDI G 055 025 A2, NISSAN 999MP-MTK00P for RE5F22A (Aisin AW55-50SN Nissan Altima, Maxima, Quest, Sentra), Matic K, Mazda K020-W0-049, Suzuki 99000-22800-001, ESSO JWS3317								
RAVENOL	Synthetic ATF with a special formulation for long-life filling.								
ATF T-WS Lifetime Art. 1211106	Toyota / Lexus JWS3324, Toyota 08886-02305, 00289-ATFWS, 08886-81210, Aisin Warner Automatic Gearbox from 2008, Chrysler 05189978AA, Chrysler 05189979AA, Chrysler Mopar AS68RC, VW/AUDI transmission 0C8 (Touareg 2011-,Q7 2010-), VW G055540A2, Isuzu 2-90531-200-0, 2-90531-201-0, VOLVO 31256774, 31256775, 31256776								
RAVENOL ATF FZ Art. 1211130	RAVENOL ATF FZ is a Full Synth. Low Viscosity ATF (Automatic-Transmission-Fluid) especially for the Mazda 6-gear transmission FW6A-EL and FW6AX-EL with SKYACTIV technology.								
	Mazda ATF FZ, Mazda 0000-FZ-113E-01, Mazda 8300-77-246								
RAVENOL ATF DSIH 6 Art. 1211133	Special fully synthetic ATF Fluid based on PAO for 6-Speed automatic transmission of Drivetrain Systems International Holdings (DSIH) for SsangYong KYRON, ACTYON, ACTYON SPORTS, Geely GC7, GX7, SC7 and EC8.								
7.1.1.1.1.1.55	SsangYong 0578-244021, Caltex 1712, ATF 3292, DSI M11 6-Speed Korando, DSI M78 6-Speed Kyron, Actyon								
RAVENOL	Fully synthetic ATF for Jatco Renault, Nissan, Mitsubishi transmissions.								
ATF Type J2/S Fluid Art. 1211115	Nissan KE908-99932 Matic Fluid J, KLE2300002 Matic Fluid J, 999MP-MTJ00P Matic Fluid J, 999MP-MTS00P Matic Fluid S, KLE24 00002 Matic Fluid S, Mitsubishi MZ 313771 ATF Fluid J2, 4031610 ATF Fluid J3, Renault Matic J6								
RAVENOL ATF JF405E	Fully synthetic ATF for JATCO 4-speed automatic transmissions JF405E or JF402E for Hyundai, Kia, Nissan, Daewoo, Mazda.								
Art. 1211118	Suzuki 99000-22A80-025, ATF 3314, Hyundai 45000-34D00, 04500-00130, 04500-00430, JWS3314								
RAVENOL ATF JF506E	Fully synthetic ATF for JATCO 5-speed automatic transmission JF506E for Ford, LandRover, VW, Jaguar, Seat.								
Art. 1211119	FORD WSS-M2C922-A1 für Durashift 5F31J, Land Rover LRN402, STC53016, STC50531, Jaguar C2S 12120, ATF Type K17, Type 3100 PL085, N402, VW G052990A2 for 09A and 09B 5-Speed Tiptronic								

## ATF — TRANSMISSION FLUIDS FOR AUTOMATIC TRANSMISSIONS -PROFESSIONAL LINE-

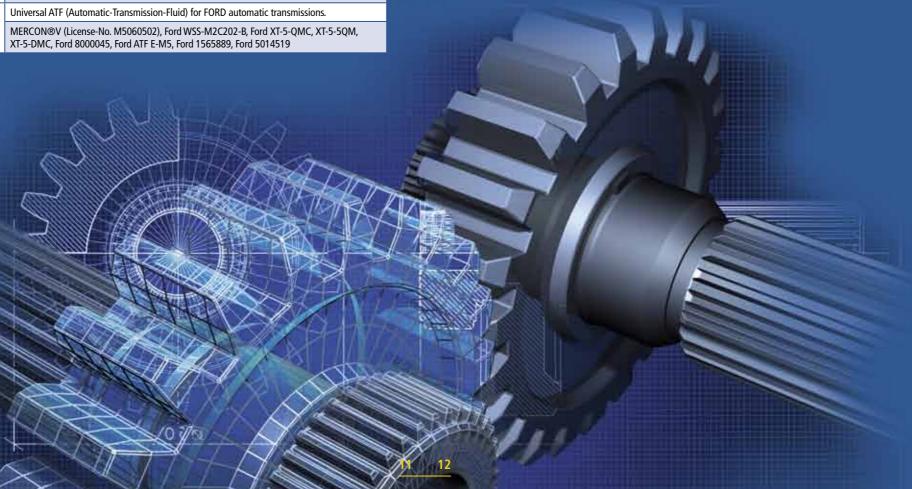
- 1	Product name	Description / Features
	RAVENOL	Fully synthetic ATF for Ford automatic transmission 4F27E from 2008 and 4R75W, 5R110W, 6R80, 6F35,
	F-LV Fluid	6F50, ECVT from 2009.
	Art. 1211120	Ford XT-10-QLVC, Ford WSS-M2C-938A, Mercon LV, Motorcraft XT-10-DLV, Motorcraft XT-10-QLV
	RAVENOL ATF Matic Type D	Fully synthetic ATF for 4- and 5-speed automatic transmissions of Nissan.  Nissan KLE2200002, KLE2000004, 999MP-MTS00P, KE90899931
	Art. 1211121	Nissan Keezzoooz, Keezoooo-, 55500 1915001, Ke50055551
	RAVENOL ATF MM SP-III Fluid	Universal ATF (Automatic-Transmission-Fluid) for MITSUBISHI, HYUNDAI and KIA-automatic transmissions. Can replace SP and SP-II Fluids.
	Art. 1212103	Mitsubishi 4024610, 4024401, ACH1ZC1X05, MZ320159, MZ320160, MZ320162, MZ320216, ATF SP-III, ATF SP-3, Hyundai 04500-00100, 04500-00400, 04500-00400, 00232-19012.
	RAVENOL	Fully synthetic ATF for special 5-speed automatic transmissions of KIA and Hyundai.
	ATF RED-1 Art. 1211117	ATF RED-1, KIA UM040-CH020, 04500-00140, Hyundai 04500-00140
	RAVENOL	Synthetic ATF for 6-speed Hyundai automatic transmission from year 2009.
	ATF SP-IV Fluid Art. 1211107	6-speed Hyundai automatic transmissions: Hyundai 00232-19045, 04500-00115, Hyundai Elantra UD 2011- L4 1.6L, L4 2.0L, iX35 2009 - L4 2.0L, 2.4L, Santa Fe 2009 - L4 2.0L, 2.2L, 2.4L, V6 3.5L, Sonata 2009- L4 2.0L, 2.4L, V6 3.5L, Tucson 2009- L4 2.0L, 2.4L, Veracruz 2011- V6 3.0, Grandeur HG 2011- V6 3.3L, 3.8L, Azera TG 2011- V6 3.3L, 3.8L, KIA Sorento 2009- V6 3.3L, 3.5L, 3.8L, Sorento XM 2011 – L4 2.4L, V6 3.5L, Sportage 2010- L4 2.0L, 2.4L, Forte/Forte Koup 2010- L4 2.0L, 2.4L, Optima TF 2011- L4 2.0L, 2.4L, Sedona VQ 2011- V6 3.5L
	RAVENOL	Fully synthetic ATF for automatic transmissions of Mitsubishi V5AWF.
	ATF MM-PA Fluid Art. 1211126	Mitsubishi V5AWF, 4030401, DIA QUEEN ATF-PA
	RAVENOL	Fully synthetic ATF for all 4-and 5-speed automatic transmissions of Honda.
	ATF Type Z1 Fluid Art. 1211109	Honda 08266-99904, Honda 08266-99907, Honda 08200-9005
	RAVENOL DW-1 Fluid	Fully synthetic ATF for automatic transmissions of Honda.
	Art. 1211125	Honda 08200-9008, 08200-9009, Honda 08266-99964, 08266-99967
	RAVENOL DPS Fluid	Synthetic special fluid with special additives for Dual Pump System (DPS) of Honda.  Honda DPFII (DPSF), 08293-99904, DPSF2 Ultra 4WD Rear, 08200-9007
	Art. 1211113	Holida DFT    (DF3F), 00255-55504, DF3F2 Ollia 4WD Neal, 00200-5007
	RAVENOL	Fully synthetic ATF for 5-speed automatic transmissions of Subaru.
	SU5 ATF Fluid Art. 1211122	Subaru 4ATF, 5ATF, ATF HP, Subaru K0415-Y0700, Subaru SOA868V9240, SOA868V9241, SOA427V1500
	RAVENOL ATF BTR 95LE	Fully synthetic ATF for transmissions of BTR Engineering Australien for SsangYong, FORD, Maserati, Mitsubishi and others.
ļ	Art. 1211116	M74LE, M85LE, M91LE, M95LE, ATF Type TQ95
	RAVENOL CVT Fluid	Fully synthetic automatic transmission fluid for CVT-automatic transmissions.  BMW CVT EZL 799A, Ford EU WSS-M2C928-A, Focus C-Max CFT23, Ford USA WSS-M2C933-A, XT-7-QCFT
	Art. 1211110	Freestyle, Five Hundred CFT30, Honda CVT Fluid 08200-9006, HMMF Ultra Fluid 08260-99904, 08260-99907, MB 236.20 A 0019894603, Mazda TFF CVT Fluid TC JWS3320 K020-W0-051W, Nissan CVT Fluid NS-1, KLE50 00002, KLE50 00004, Opel/GM 1940713, Subaru i-CVT Fluid K0415-YA090, Suzuki S-CVT 99000-22801-000, Toyota CVT Fluid TC 08886-02105, VW/AUDI G052180A1/A2/A6, TL 52180, VW G 052 516 A2, Mini Cooper CVT
	RAVENOL CVT KFE Fluid	Fully synthetic CVT (Continuously Variable Transmission) fluid with low viscosity based on fully synthetic oil (PAO) with a special additive and inhibition to ensure the proper operation of the automatic transmissions
	Art. 1211134	Toyota - 08886-02505, 08886-02503
Ę	RAVENOL CVTF NS2/J1 Fluid	Fully synthetic CVTF (Continuously Variable Transmission Fluid) for CVT of JATCO.  Mitsubishi 50001401 Nissan KLEE20000403 KLEE200003 DSA Standard 073EEE Suruki CVT Eluid
	Art. 1211114	Mitsubishi S0001401, Nissan KLE520000403, KLE5200002, PSA Standard 9735EF, Suzuki CVT Fluid Green-1 99000-22B15-046, Dodge Caliber, Jeep Compass, Jeep Patriot
	RAVENOL CVTF NS3/J4 Fluid	Fully synthetic CVTF (Continuously Variable Transmission Fluid), based on PAO with special additivation and inhibition.
_	Art. 1211132	Nissan KLE53-00004, KLE53-00002, 999MP-NS300P, ATF NS-3, Mitsubishi MZ320261, MZ320262, MZ320288, MZ102658, ATF J4.
ζ	RAVENOL	Semi-synthetic transmission fluid for Dual Clutch Gear.
	DCT/DSG Getriebe Fluid Art. 1212106	MB 236.21, VW G 052 182 A2, Audi G 052 529 A2 S-Tronic, BMW DCTF-1, BMW 83220440214, 83222148579, 83222148578, 83222147477, FORD 1490763, FORD 1490761, FORD WSS-M2C936-A, FORD USA XT-11-QDC, FORD WSD-M2C200-D2, Chrysler 68044345 EA, Peugeot/Citroën 9734.S2 for DCS6 (Peugeot 4007, CITROËN C-CROSSER), FIAT 9.55550-MZ6 for TCT (Twin Clutch Transmission) in Alfa Romeo MiTo and Giulietta, Renault EDC (Efficiency Dual Clutch System), VOLVO 1161838, VOLVO 1161839, MITSUBISHI MZ320065, MITSUBISHI Dia-Queen SSTF-I, BOT 341, Porsche 0000 043 20
	RAVENOL	Special transmission fluid for use in the new Nissan GT-R R35 double clutch transmission (DCT).
3	DCT GT-R Fluid Art. 1211129	Nissan KLD4100002EU, KLD41-00002, 999MP-GTRT00P

## **ATF** — TRANSMISSION FLUIDS FOR AUTOMATIC TRANSMISSIONS

Product name	GM-Specifi- cation	Description / Features				
RAVENOL ATF +4® Fluid	ATF+4®	Fully synthetic automatic transmission fluid for Chrysler, Dodge, Plymouth, Jeep and Eagle automatic transmissions. Mixable with all ATF+4®, ATF+2® or ATF+3® transmission fluids.				
Art. 1211100		License-No. 40630041 FCA US LLC (formerly known as Chrysler Group LLC), Mopar 68218057AA 68218058AA 05013457AA 05013458AA MS-9602				
RAVENOL		Special transmission fluid for Ford, Borg-Wagner, Volvo.				
ATF Fluid Type F Art. 1213105		FORD Type M2C-33F/G, Motorcraft XT-1-QF, VOLVO 97330				
RAVENOL ATF Fluid Art. 1213101	Type A Suffix A (TASA)	Mineral automatic transmission fluid (ATF) for hydrostatic and hydrodynamic systems, if ATF Type A Suffix A is required. For use in automatik transmissions, turbo clutches, power couplings and other hydrostatic and hydrodynamic systems.				
		MB 236.2, MAN 339 Type A, Renk Doromat, Cat. TO-2, Allison C4				
RAVENOL ATF Dexron D II	DEXRON® II D	High performance mineral transmission fluid for automatic gearboxes, hydraulic steering, power converters and transmissions.				
Art. 1213102		MB 236.6, MB 236.7, ZF TE-ML 03D, 04D, 11A, 14A, 17C, 05L, VOITH H55.6335.xx, MAN 339 Type Z-1, Ford SQM-9010B, Ford M2C-138 CJ, 166H, 185A, Cat. TO-2, MERCON, RENK DOROMAT, CVT, Allison C3/C4.				
RAVENOL ATF Dexron F III	DEXRON® III F-30140	High performance semi synthetic transmission fluid for automatic gearboxes, hydraulic steering, power converters and transmissions.				
Art. 1213104		MB 236.1, MB 236.5, MAN 339 Type V1, MAN 339 Typ Z1, ZF TE-ML 02F, 03D, 04D, 14A, 17C, 05L, Ford Mercon M-940717, Voith, Nissan, Allison C4, Cat. TO-2				
RAVENOL ATF Dexron III H Art. 1212100	DEXRON® III H, Allison C4	High performance semi synthetic universal ATF (Automatic-Transmission-Fluid) for automatic gearboxes with or without controlled torque converter lockup clutch (GKÜB = clutch gearbox bridging), if transmission fluids type DEXRON III H are required.				
		MAN 339 Type Z2, ZF TE-ML 04D, 14B, 05L, 16L, 17C, Voith 55.6336.3x Extended Drain (G1363), Allison C4-33072010 (ATF III H), Allison TES-389 AA-33072010 (ATF III H), MB 236.1, MB 236.6, MB 236.9, MB 236.10, VOLVO Transmission Oil 97341, VOLVO 1161521 and 1161621				
RAVENOL ATF Dexron II E	Dexron® II E	High performance fully synthetic ATF (Automatic-Transmission-Fluid) for automatic transmissions, torque converters and power shifts.				
Art. 1211103		MB 236.8, MB 236.5, Voith 55.6336.3x Extended Drain (G1363), Allison C4-32652009 (ATF II E), MAN 339 Type Z-2, MAN 339 Type V-2, ZF TE-ML 04D, 09X, 14B, 16L, Cat. TO-2				
RAVENOL	Dexron® VI	Synthetic ATF, approved by General Motors for use in vehicles with automatic transmissions.				
ATF DEXRON® VI Art. 1211105		Dexron ®-VI (License-No. J-60331), GMN 10060, MB 236.41, BMW 83 22 0 397 114, GM1940184, GM93165414				
RAVENOL	MERCON®V	Universal ATF (Automatic-Transmission-Fluid) for FORD automatic transmissions.				
ATF MERCON V Art. 1212101		MERCON®V (License-No. M5060502), Ford WSS-M2C202-B, Ford XT-5-QMC, XT-5-5QM, XT-5-DMC, Ford 8000045, Ford ATF E-M5, Ford 1565889, Ford 5014519				

## Power steering fluids / Special hydraulic fluids

Product name	Cla	assificatio	ns	Description / Features
RAVENOL GHA-F Gearbox Hydraulic Actuator Fluid Art. 1181201				Special hydraulic oil for electrohydraulic actuators based on synthetic and mineral oil with ashless additives. For use in MCP electronically controlled transmissions of Peugeot/Citroën and Dualogic and Selespeed gearboxes of FIAT/Alfa Romeo. Optimum performance in electro-hydraulic and electronically controlled drives and circuit boards.
				Peugeot/Citroën 9979.A4 for MCP Automated Gearbox, FIAT/Alfa Romeo 15081616 CS SPEED for Dualogic and Selespeed Gearbox, FIAT 9.55550-SA1 Nr. F005.F98
RAVENOL PSF-Y Fluid				Fully synthetic servo steering fluid for Volkswagen, Mercedes and Chrysler.
Art. 1211123				VW G009300A2, Mercedes A0009898803, Chrysler 05098158A, MS-5931, MS-9933, 04883077, GM 9985010, 89020661, 1050017, Texaco TL 4634, HONDA 08206-9002, 08285-P99-01Z-T1
RAVENOL SSF Special Servolenkung Fluid	ISO 7308		DIN 51 524 Part 2	Special hydraulic fluid for use as a central hydraulic fluid in power steering, level control, hydraulic brake booster, hydro-pneumatic suspension. For VW, Audi, Seat, Skoda.
Art. 1181100				VWTL 521 46 (G002 000, G004 000), MB 343.0 / 345.0, CHF11S, CHF202, Opel 1940 715, Opel 1940 766, Ford M2C204-A, Ford 1 384 110, ZF TE-ML 02K, SAAB 93160548, BMW 83 29 0 429 576, Citroën 9979 A1, Land Rover Cold Climate PAS Fluid 14315 LRN2261, VOLVO 30741424, Hyundai/Kia PSF-4 03100-00130, Toyota PSF NEW-W, Toyota 08886-01115
RAVENOL LHM+ Fluid	ISO 7308		DIN 51 524	Special hydraulic fluid designed for use in vehicles of the PSA group (Citroën, Peugeot).
Art. 1181110			Part 2	PSA Standard B 71 2710
RAVENOL				Special synthetic hydraulic fluid for servo steering.
Hydraulik PSF Fluid Art. 1181000				Honda PSF-S, Hyundai PSF-3, KIA PSF-III, Mazda PSF, Subaru PS Fluid, TOYOTA PSF-EH, CITROËN/PEUGEOT 9735EJ for C-Crosser and PEUGEOT 4007, MITSUBISHI DIAMOND PSF-2M



	(	Classification	)S	
Product name	SAE	API	Specifi- cation	Description / Features
RAVENOL MTF-1 Art. 1221102	75W-85	GL-4/GL-5		Fully synthetic gear oil based on PAO for for for specific switching, distribution and differential gears.
				General Motors 1940182, 93740319, Hyundai 04300-00110, 04300-00140, 08950-00020-B, 08950-00020-A, MB 235.7 A 001 989 33 03, MB 235.4 A 001 989 14, OPEL B 040 2071, Mitsubishi 3717610, MTF BOT 402 BOT 0063 for F35/MU3 5-stroke SAAB/GM/Opel, Nissan KLD26-75802, KE91699931, KE91699942, 999MP-MTF00P, TOYOTA 08885-02606, 08885-81070, 08885-81060
RAVENOL MTF-2	75W-80	GL-4/MT-1		Fully synthetic gear oil based on PAO for modern manual transmissions.
Art. 1221103				AC Delco 10-4033, BMW 2300 7533 513 MTF LT-2, 83 22 0 309 031 2300 1434 404 MTF LT-1, FIAT 9.55550-MZ2 F178.B06 14621616, FORD WSS-M2C200-D2 WSS-M2C200-C3 1547953 1382914, General Motors 1940711, 88861800, 88861801, Honda 08261-99964 Genuine MTF Fluid 08798-9031 MTF-7289, Hyundai 02200-00130 TOD, Land Rover STC 9157 TYK500030 STC 9158, MB 235.10 A 001 989 26 03, Mitsubishi MZ312644 3005401, MTF-94 Fluid for Land Rover, MG and Mini Cooper, Nissan 999MP-MTF20P KE91699932R, Peugeot 9730A2, Subaru K0321-F0090, TOYOTA 08885-00705, VOLVO 1161681 1161745, VW/AUDI G 052911A2, G 055538A2 for ZF 6S450 Amarok 0C6, MTF CT4447 M+, MTF ETL8997B
RAVENOL MTF-3	75W			Fully synthetic gear oil for special manual transmissions.
Art. 1221104				BMW 2300 7533 818 MTF LT-3, 83 22 0 396 706, 83 22 7 533 818 MTF LT-3, MTF JWS2271, PSA Standard 9730A8, TOYOTA 08885-81001, 08885-81081, VOLVO 1161839, 1161838, VW/AUDI G 060726A2, G 052171A2, VW G 070 726 A2, FORD WSS-M2C200-D2

## GEAR OILS FOR MANUAL TRANSMISSIONS

		Classification	ıs	
Product name	SAE	API	Specifi- cation	Description / Features
RAVENOL MDL Multi-Disc				Semi-synthetic lubricant for clutch-type lamella limited slip dif- ferentials.
locking differentials Art. 1222103				AcDelco 10-4032, Daimler A 0019895903 for Mercedes-Benz M-Klasse (W164, X164) GM 92184900, Land Rover LR019727, BOT 720, TYK500070, Porsche 000.043.300.37 for Porsche Cayenne, Porsche Panamera, VW G052196A2 for VW Touareg
RAVENOL STF Synchromesh				Fully synthetic gear oil for manual transmissions and transfer boxes from GM and Chrysler.
Transmission Fluid Art. 1221105				Chrysler MS-9417, MS-9224, 4874465, 4874464, General Motors 12345349, 9985648, 1052931, 12377916, 9985535, 12345577, 9986105
RAVENOL Truck MTF-50				Fully synthetic heavy duty manual transmission oil requiring a non- EP lubricant.
Art. 1221106				API MT-1, EATON PS-164 Rev. 7, MACK TO-A PLUS, International TMS-6816, ZF FreedomLine, TE-ML 02L, ArvinMeritor 0-81
RAVENOL VSG	75W-90	GL-5/GL-4	MIL-L-	Fully synthetic gear oil for use in heavily loaded transmissions.
Art. 1221101			2105D	MB 235.8, MB 235.11, MAN 342 Type S-1, ZF TE-ML 12B, 16F, 17B, SCANIA STO 1:0, Renault LKW, DAF LKW (for extended drain), VOLVO 97312 / 97315, IVECO, BOT 328, 130M, 720, BMW 83229407768, BMW OSP, BMW SAF-X0
RAVENOL SSG Spec Synt LKW Getriebeöl	75W-80	GL-4	MIL-L- 2105D	Fully synthetic low friction gear oil especially for high stressed gears. For synchronized truck manual transmissions with intarder or retarder. Extreme oil change intervals to 500.000 km.
Art. 1221100				ZF TE-ML 01L, 02L, 16K, MAN 341 Type Z4, MAN 341 Typ E3, MAN 341 Type V-R, DAF/VOLVO 97305, 97307, EATON (Extended drain) / IVECO / RENAULT
RAVENOL Getriebeoel SLG Art. 1223305	80W-90	GL-4/GL-5/ MT-1	MIL-L- 2105A/B/ C/D/E	High performance multifunction gear oil for truck manual transmissions, auxiliary drives an rear axles, including highly stressed hypoid drive axles.
				MAN 341 Type E2, MAN 3343 Type M (extended oil change intervals), SCANIA STO 1:0, ZFTE-ML 02B, 05A, 12E, 16B, 17B,19B, 21A, VOLVO 97310

	C	Classification	ıs		
Product name	SAE	API	Specifi- cation	Description / Features	
RAVENOL Teilsynthetisches Getriebeöl TSG	75W-90	GL-4		Semi synthetic multipurpose gear oil for high loaded manual transmissions with or without synchronization, distributors and steering transmision for passenger cars and working machines.	
Art. 1222101				VW 501 50, Ford M2C-175, GM Opel B 040 104 3	
RAVENOL TGO Teilsynthetisches Getriebeöl	75W-90	GL-5	MIL-L- 2105D	Semi synthetic gear oil especially for highest stressed hypoid geared transmissions.	
Art. 1222105				ZF TE-ML 05A, 07A, 17B, CS 3000B, Ford M2C-9002A, Mack GO-G, GM, MB 235.0, MB 235.1	
RAVENOL	75W-90	GL-5 + LS	MIL-L-	Semi-synthetic gear oil for Limited Slip (LS) type differentials.	
Getriebeöl LS Art. 1222102			2105D	ZF TE-ML 05C/D, Limited Slip	
RAVENOL PSA Art. 1222100	75W-80	GL-4+		Semi synthetic gear oil especially developed for Citroën and Peugeot vehicles.  PSA Standard B 71 2315	
DAVENOL TDC	75W-110	GL-4	MIL-L-	Universal fully synthetic gear oil for manual transmissions and hypoid	
RAVENOL TDG Art. 1221109	7500-110	GL-5 MT-1	2105D MIL-PRF- 2105E	differentials in passenger cars, delivery vans and heavy truck. "Total Dri Line" oil is as universal product widely usuable.	
				ZF TE-ML 05B, 12B, 16F, 19C, 21B, MACK GO-J, DAF, Scania STO 1:0	
RAVENOL Getriebeöl SLS	75W-140	GL-5 + LS	MIL-L- 2105D	Fully synthetic multigrade hypoid gear oil for highest stressed rear axle and differential gears with "Limited Slip" specification.	
Art. 1221110				Limited Slip	
RAVENOL Sperrdiff. Hypoid	85W-90	GL-5 + LS	MIL-L- 2105D	Mineral gear oil for Limited Slip (LS) and locking type differentials.	
Getriebeöl LS Art. 1223301			21030	ZF TE-ML 05C, 12C, 16E, Ford Specification, Limited Slip	
RAVENOL	90	GL-5 + LS	MIL-L-	Mineral gear oil for Limited Slip (LS) and locking type differentials.	
Sperrdiff. Hypoid Getriebeöl LS Art. 1223302			2105D	ZFTE-ML 05C, 12C, 16E, 21C, Ford Specification, Limited Slip	
RAVENOL Getriebeöl EPX Art. 1223201,	80 90	GL-5	MIL-L- 2105D	Mineral gear oil for synchromesh and non-synchronized manual transm sions and hypoid differentials, as well as for power distributors and intermediate gear, side gears in vehicles and machinery.	
Art. 1223202				MB 235.0, MAN 342 Type M1, ZF TE-ML 05A, 07A, 16B, 16C, 16D, 17B, Ford SQM-2C-9002AA	
RAVENOL Getriebeöl EPX Art. 1223205	80W-90	GL-5	MIL-L- 2105D	Mineral multigrade gear oil for synchromesh and non-synchronized manual transmissions and hypoid differentials, as well as for power distributors and intermediate gear, side gears in vehicles and machinery	
				ZF TE-ML 16B, 17B, 19B, 21A, LOVAT LOV-204, MB 235.0, MAN 342 Typ M1, Ford SQM-2C-9002 AA	
RAVENOL Getriebeöl EPX Art. 1223206	85W-90	GL-5	MIL-L- 2105D	Mineral multigrade gear oil for synchromesh and non-synchronized manual transmission, as well as for power distributors and intermediate gear, side gear in vehicles and machinery.	
				ZF TE-ML 05A, 16B, 17B, 19B, MAN 342 Type M1, MB 235.0, Ford SQM- 2C-9002 AA	
RAVENOL Getriebeöl EPX	85W-140	GL-5	MIL-L- 2105D	Mineral multigrade gear oil for synchromesh and non-synchronized manual transmission, as well as for power distributors and intermediate	
Art. 1223211			21030	gear, side gear in vehicles and machinery.  ZF TE-ML 05A, 16D, 21A, Ford M2C-9002A, MAN 342 Type M1, CS 3000	
				Mack GO-G, GM	
RAVENOL Getriebeöl EPX Art. 1223210	140	GL-4/GL-5	MIL-L- 2105D	Mineral gear oil for synchromesh and non-synchronized manual transm sions and hypoid differentials, as well as for power distributors and intermediate gear, side gears in vehicles and machinery	
				ZF TE-ML 05A, 07A, 17B, CS 3000B, Ford M2C-9002A, Mack GO-G, GM	
RAVENOL Getriebeöl MZG	80	GL-4	MIL-L- 2105D	Mineral multifunction gear oil for lubricating of manual transmissions, differentials and steering transmissions in passenger cars.	
Art. 1223101				MAN 341 Type Z1, MAN 341 Type E1, ZF TE-ML 02A, 17A, MB 235.1, Fo SQM-2C-9008A	
RAVENOL Getriebeöl MZG	80W-90	GL-4	MIL-L- 2105D	Mineral multifunction gear oil for lubricating of manual transmissions, differentials and steering transmissions in passenger cars.	
Art. 1223105				MAN 341 Type Z1, MAN 341 Type E1, ZF TE-ML 02B, 16A, 17A, 19A, ME 235.1, Ford SQM-2C-9008A	
RAVENOL Getriebeöl MZG	90	GL-4	MIL-L- 2105D	Mineral multifunction gear oil for lubricating of manual transmissions, differentials and steering transmissions in passenger cars.	
Art. 1223102				MAN 341 Type Z1, MAN 341 Type E1, ZF TE-ML 02A, 16A, 17A, MB 235.1, Ford SQM-2C-9008A	

## **ATF** — TRANSMISSION FLUIDS FOR COMMERCIAL VEHICLE **AUTOMATIC TRANSMISSIONS**

Product name	Cla	Classifications		Description / Features
RAVENOL ATF ZMS (*Professional Line*)				ATF of the latest generation, for commercial vehicle automatic transmissions of ZF, allows oil change intervals of 150,000km or max. 3 years
Art. 1211102				MAN 339 Typ Z4 (ZF Ecomat 150.000 km), ZF TE-ML 04D, 14E, 16N, 20E
RAVENOL LKW ATF Synthetik Art. 1211104				Fully synthetic ATF for the latest generation commercial of vehicle automatic transmissions.

## COMMERCIAL VEHICLES ENGINE OILS

COMMERCIAL				
Product name		Classification		Description / Features
	SAE	API	ACEA	·
RAVENOL Arctic Truck Art. 1121100	0W-30	CH-4/SJ		Fully synthetic motor oil for diesel engines of commercial vehicles and high-performance equipment with heavy loads and in stationary plants. "Cold start" at -40°C.
				Global DHD-1, JASO DH-1, Caterpillar ECF-1, Cummins CES 20076, Detroit Diesel 7S E270 (4-Stroke Cycle), MACK EO-M, Komatsu, Hitachi, Liebherr
RAVENOL Super Performance Truck	5W-30	CF/CI-4	E4, E7	USHPD low friction motor oil for commercial vehicle. Oil change interval up to over 100.000 km. All year recommended for EURO I, II, III, IV and EURO V engines.
Art. 1122102				MB 228.5, MB 235.28, MTU Type 3, MAN M3277, Volvo VDS 3, VDS 2, Cummins CES 20076, -77, -78, Renault RXD, IVECO, MACK EO-M Plus, Voith Retarder B, Global DHD-1, JASO DH-1, SCANIA LDF-3
RAVENOL Super Synthetic Truck	5W-30		E7, E6, E4	All-season fully synthetic "Low SAPS" lorry motor oil. For use in EURO 4 and EURO 5 engines along with low-sulphur diesel. Suitable for use in engines with or without particle filter and catalytic converter.
Art. 1121101				MB 228.51, MAN 3477, MTU Type 3.1, Volvo VDS-3, Renault RXD
RAVENOL NDT Nord Duty Truck Art. 1122103	5W-40	CJ-4/SM		All-season multigrade engine oil for use in heavy duty commercial vehicle diesel engines with optimized exhaust systems. Extended oil change intervals.
				MB 228.31, Volvo VDS-4, Renault RLD-3, Mack EO-O Premium plus, MTU Type 2, Cummins CES 20081, Detroit Diesel DD93K218, DD93K215, DD93K214
RAVENOL Expert SHPD	10W-40	CI-4/SL	E4, E7, A3/ B4	Universal low friction motor oil for high performance suction and turbo diesel engines. Longest oil change intervals.
Art. 1122105				MB 228.3, MB 229.1, Cummins CES 20077, -78, DEUTZ DQC III-10, MAN M3275, MACK EOM-Plus, MACK EO-N, MTU Type 2, Renault VI RLD-2, TEDOM 258-3 (61-0-0258), Volvo VDS 3, YaMZ, Cummins CES 20071, -72, -76, SCANIA LDF, Global DHD-1, VW 500 00, 505 00, Caterpillar TO-2, Allison C4, Voith Retarder B, IVECO, DAF
RAVENOL Performance Truck	10W-40	CF/CI-4	E4, E7, A3/ B4	Semi-synthetic multi grade low friction diesel engine motor oil, UHPD High performance motor oil. Suitable for longest oil change intervals.
Art. 1122106				MB 228.5, MAN M3277, MTU Type 3, VOLVO VDS 3, Renault RVI RXD/RLD-2, TEDOM 258-4 (61-0-0258), DAF HP1/2, DEUTZ DQC III-10, SCANIA LDF 2, MACK EO-M Plus, Cummins CES 20076, -77, -78, JASO DH-1 (JASO M355:2000), Voith Retarder B, Global DHD-1, SCANIA LDF-3
RAVENOL EURO IV Truck Art. 1122107	10W-40		E6, E7	Universal low friction motor oil based on synthetic PAO- and HC-Base oils, for high performance suction and turbo diesel engines. Also suitable for gasoline engines. Recommended for EURO I, II, III, IV and EURO V engines.
				MB 228.51, MAN M3477, MTU Typ 3, MTU Typ 3.1, Renault RXD, VOLVO VDS-3, Mack EO-N, Renault VI RLD-2, Scania LDF, Deutz DQC III-10 LA, DAF HP-2, MAN M3277 (CRF, exhaust gas return system)
RAVENOL EURO VI Truck Art. 1122108	10W-40	CJ-4/ SN	E9	Semi-synthetic fuel economy "Low SAPS" year-round multigrade diesel engine oil based on the latest additive technology combined with very special base oils.
				Deutz DQC III-10 LA, MB 228.51, Cummins CES 20076/77, MAN M3477, M3271-1, MTU Type 3.1, MTU Type 3, VOLVO VDS-3, Renault RLD-2, RXD, MACK EO-N, Scania LDF-2,
RAVENOL Low Emission Truck Art. 1122110	10W-30	CJ-4/SM	E7, E9	Heavy Duty engine which fulfils API CJ-4 requirements and is formulated with unique low SAPS high performance additives in combination with special selected base oils.
				VOLVO VDS-4, Mack EO-O Premium Plus, Renault VI RLD 3, MB 228.31, MAN M3575, Caterpillar ECF-2/-3

## Commercial vehicles engine oils

Due due transce	Classifications			Description / Footones
Product name	SAE	API	ACEA	Description / Features
RAVENOL Low Emission Truck Art. 1122109	10W-40	CJ-4/SN	E9	All-season multigrade SHPD engine oil (Super High Performance Diesel), which has been developed to the exhaust emission standards Euro 5 and Euro 6 and is used in extremely heavy duty commercial vehicle diesel engines
				MB 228.31, MAN M 3575, Volvo VDS-4 (STD 417-0001), Renault VI RLD-3, Deutz DQC III-10 LA, MTU MTL 5044 Type 2.1, Caterpillar ECF-1a, ECF-2 and ECF-3, Cummins CES 20081, Detroit Diesel DDC 93K218, Mack EO-O Premium Plus
RAVENOL Low Emission Truck Art. 1123100	15W-40	CJ-4/SM	E7, E9	Mineral multi grade truck engine oil with highest performance. For use in EURO 5 engines with exhaust systems (EGR, SCR, DPF, DPD, DPR), EURO 3 and EURO 4 engines. Enhanced performance and cleanness of the engines.
				VOLVO VDS 4, Mack EO-O Premium Plus, Renault VI RLD 3 (compliance), Detroit Diesel Power Guard Oil Specification 93K214, Cummins CES 20081, TATRA 30/12, MB 228.31, MAN M3575, Caterpillar ECF-2/-3, JASO DH-2, Japan Ultra-Low PM Emission Diesel, EURO IV and EURO V, U.S. EPA Tier 3 emissions regulation, DDC 93K218
RAVENOL Turbo-Plus SHPD Art. 1123105	10W-30	CI-4/SL	E7, A3/B4	Mineral SHPD-motor oil for mixed fleet of diesel and gasoline engines also with turbochargers. Specially designed for extended oil change intervals.
				YAMZ, MB 228.3, MAN M 3275, Volvo VDS 3, MTU Type 3, Renault RLD, Cummins CES 20071-, 72, -76, -77, Caterpillar TO-2
RAVENOL Turbo-Plus SHPD Art. 1123115	15W-40	CI-4/CI-4+/ CH-4/SL	E7, A3/B4	Mineral SHPD-motor oil for mixed fleet of diesel and gasoline engines also with turbochargers. Specially designed for extended oil change intervals.
				MB 228.3, MB 229.1, MAN M3275-1 (Multigrades), Volvo VDS 3, MTU Type 2, STEYR Motor GAZ 560, YaMZ, Cummins CES 20071, -72, 76, -77, -78, Renault RLD/RLD-2, ZF TE-ML 07C, TEDOM 258-3 (61-0-0258), JASO DH-1 (D049RAV123), Deutz DQC III-10, Global DHD-1, Mack EO-M, EO-M Plus, IVECO, Allison C4, Caterpillar TO-2, KHD (Klöckner-Humboldt Deutz), Scania LDF
RAVENOL Turbo-Plus SHPD Art. 1123120	20W-50	CI-4/SL	E7, A3/B4	Mineral SHPD-motor oil for mixed fleet of diesel and gasoline engines also with turbochargers. Specially designed for extended oil change intervals.
				MB 228.3, MAN M 3275, Volvo VDS 3, MTU Type 3, Renault RLD, Cummins CES 20071, -72, -76, -77, Caterpillar TO-2



	Classifications			
Product name	SAE	API	ACEA	Description / Features
RAVENOL Formel Diesel Super	10W-30	CF-4/CF	E2, B4	High performance mineral multi grade motor oil for diesel engines with or without turbo charger. Extended oil change intervals.
Art. 1123205				MB 228.1, VW 505 00, MAN 271, Volvo VDS, MTU Type 2, ZF TE-ML 07C, Cat. TO-2, Allison C4
RAVENOL Formel Diesel Super	15W-40	CF-4	E2, B4	High performance mineral multi grade motor oil for diesel engines with or without turbo charger. Extended oil change intervals.
Art. 1123215				MB 228.1, MB 229.1, MAN 271, ZFTE-ML 07C, MTU Type 2, VW 505 00, Allison C4, Cat. TO-2, VOLVO VDS, MACK EO-L, Renault RD-2/RLD, TEDOM 258-2 (61-0-0258)
RAVENOL Formel Diesel Super	20W-50	CF-4	E2, B4	High performance mineral multi grade motor oil for diesel engines with or without turbo charger. Extended oil change intervals.
Art. 1123220				MB 228.1, VW 505 00, MAN 271, Volvo VDS, MTU Typ 2, ZF TE-ML 07C, Cat. TO-2, Allison C4
RAVENOL Spezial Diesel	10W-30 15W-40	CD	B2	Multigrade motor oil for diesel engines with and without turbo charging. All year lubrication at different conditions.
Art. 1113310, Art. 1113311				MIL-L-46152 B, MIL-L-2104 D, MB 227.1, CCMC G4
RAVENOL Super Truck	10W	CF-4	E2, B4	Monograde mineral motor oil used in trucks and stationary plants. High wear and corrosion protection.
Art. 1123710				MB 228.0, MAN 270, MTU Type 1, VOITH DIWA
RAVENOL Super Truck	20W-20	CF-4	E2, B4	Monograde mineral motor oil used in trucks and stationary plants. High wear and corrosion protection.
Art. 1123715				MB 228.0
RAVENOL Super Truck	30	CF-4	E2, B4	Monograde mineral motor oil used in trucks and stationary plants. High wear and corrosion protection.
Art. 1123720				MB 228.0, ZF TE-ML 04B
RAVENOL Super Truck	40	CF-4	E2, B4	Monograde mineral motor oil used in trucks and stationary plants. High wear and corrosion protection.
Art. 1123725				MB 228.0, MAN 270, MTU Type 1, VOITH DIWA, ZFTE-ML 04B
RAVENOL Super Truck Art. 1123726	50	CF-4	E2, B4	Monograde mineral motor oil used in trucks and stationary plants. High wear and corrosion protection.
	40144	56.165	F2 D4	MB 228.0
RAVENOL Standard Truck Art. 1123610	10W	SG/CF	E2, B4	Universal mineral monograde motor oil used in diesel engines with and without turbo charging in trucks. Also suitable for stationary plants.
				MB 227.0, MB 228.0, MAN 270, Cat. TO-2, MTU Type 1, Allison C4, ZF TE-ML 03, 04, 05, 06, 07, 10, 14
RAVENOL Standard Truck Art. 1123615	20W-20	SG/CF	E2, B4	Universal mineral monograde motor oil used in diesel engines with and without turbo charging in trucks. Also suitable for stationary plants.
				MB 227.0, MB 228.0, MAN 270, Cat. TO-2, MTU Type 1, Allison C4, ZF TE-ML 03, 04, 05, 06, 07, 10, 14
RAVENOL Standard Truck Art. 1123620	30	CD	E2, B4	Universal mineral mono grademotor oil used in diesel engines with and without turbo charging in trucks. Also suitable for stationary plants.
				MTU Type 1 (DDC BR 2000 & 4000), MB 228.0, MAN 270, VOITH Retarder A, VOITH DIWA, ZF TE-ML 02C, 03B, 04B, 06A, 07D
RAVENOL Standard Truck Art. 1123625	40	CF	E2, B4	Universal mineral monograde motor oil used in diesel engines with and without turbo charging in trucks. Also suitable for stationary plants.
				MTU Type 1 (DDC BR 2000 & 4000), MB 228.0, MAN 270, VOITH Retarder A, VOITH DIWA, ZF TE-ML 02C, 03B, 04B, 06A, 07D
RAVENOL Standard Truck Art. 1123626	50	CD	E2, B4	Universal mineral monograde motor oil used in diesel engines with and without turbo charging in trucks. Also suitable for stationary plants.
				MTU Type 1 (DDC BR 2000 & 4000), MB 228.0, MAN 270, VOITH Retarder A, VOITH DIWA, ZF TE-ML 02C, 03B, 04B, 06A, 07D

## TRACTOR AND OFF-HIGHWAY LUBRICANTS

Product name	C	lassification	S	Description / Features
Product name	SAE	API	ACEA	Description / Features
RAVENOL STOU Art. 1310100	10W-30	SF/CE/CF-4/ CG-4, GL-4, HLP ISO	E2	Special oil type STOU for agricultural machines, excavators and construction equipment. For use in engines, transmissions, hydraulic systems and compressors.
		VG 68		SAE 80W, API GL-4, MIL-L-2105, Allison C4, Caterpillar TO-2, ZF TE-ML 06B, 07B, HLP ISO VG 68, Vickers-Pump test, Ford-Pump test, Denison HF 2, John Deere J27 A, J20 C/D, Ford NH 024C, 324B, 540B, Massey-Ferguson M 1127, M 1139, M 1144, Case International J I, Case MS 1118/1209/1206, FIAT AF 87, International Harvester B6, Holman Compair Compressor, Atlas Copco Compressor
RAVENOL STOU Art. 1310112	15W-30	CE/SF, GL-4, HLP ISO	E1/E2	Special oil type STOU for agricultural machines, excavators and construction equipment. For use in engines, transmissions and hydraulic systems.
		VG 68		SAE 80W, API GL-4, MIL-L-2105, Allison C4, Caterpillar TO-2, ZF TE-ML 06B, 07B, HLP ISO VG 68, Vickers-Pumpentest, Ford-Pumpentest, Denison HF 2, John Deere J27 A, J20 C/D, Ford NH 024C, 324B, 540B, Massey-Ferguson M 1127, M 1139, M 1144, Case International J I, Case MS 1118/1209/1206, FIAT AF 87, International Harvester B6, Holman Compair Kompressor, Atlas Copco Kompressor
RAVENOL STOU Art. 1310111	10W-40	CG-4, GL-4, ISO VG	E2	Special oil type STOU for agricultural machines, excavators and construction equipment. For use in engines, transmissions and hydraulic systems.
		32-100		Massey-Ferguson M 1127, M 1139, M 1144, MB-Blatt 227.1, John Deere J 27 A, J20 C/D, Steyr 387 88001, Case International J I Case MS 1118/1209, FIAT AF 87, Ford ESN-M2C-41B, -86A, -121E, -134D, -159 B/C, Ford NH 024C, 324B, 40B, International Harvester B6, MIL-L-2105, MIL-L-2104 D, Allison C-4, Caterpillar TO-2, ZFTE-ML 06B, 07B, Denison HF 2, Holman Compair Kompressor; Atlas Copco Kompressor
RAVENOL STOU Art. 1310113	15W-40	SF/CE/CF-4, GL-4	E1, CCMC G2/D4	Special oil type STOU for agricultural machines, excavators and construction equipment. For use in engines, transmissions and hydraulic systems.
				Ford M2C-159C, MF M-1143 / 1144, ZF TE-ML 06B, 07B, Allison C-4, Cat. T0- 2, Ford M2C 86A, 134D, John Deere J 27, NH 420A / NH 410B, MB 227.1
RAVENOL STOU Art. 1310114	20W-40	SF/CE/CF-4, GL-4	CCMC G2/ D4	Special oil type STOU for agricultural machines, excavators and construction equipment. For use in engines, transmissions and hydraulic systems.
				Ford M2C-159C, MF M-1143 / 1144, ZF TE-ML 06B, 07B, Allison C-4, Cat. TO- 2, Ford M2C 86A/ 134D, John Deere J 27, NH 420A / NH 410B, MB 227.1
RAVENOL	10W	CF/CF-2		Specific oil for construction vehicles and tractor vehicles
CATOEL TO-4 Art. 1310610, Art. 1310613, Art. 1310614	30 40			Caterpillar TO-4, Allison C4, Komatsu Micro Clutch, Eaton Fuller, ZFTE-ML 03C, 07F
RAVENOL	50	CF		Specific oil for construction vehicles and tractor vehicles.
CATOEL TO-4 Art. 1310615, Art. 1310616	60			Caterpillar TO-4, Allison C4, Komatsu Micro Clutch, Eaton Fuller, ZF TE-ML 03C, 07F
RAVENOL UTTO BIO		GL-4		Biodegradable universal hydraulic and transmission oil for use in hydraulic and transmission systems of agriculture and road construction equipment.
Art. 1310720				Massey Fergusson, John Deere, Ford New Holland, Biodegradability: CEC-L- 33-T83 <90% (3 Wks.)
RAVENOL		GL-4		Mineral gearoil for use in hydraulic and transmission systems of tractors.
Getriebeöl UTTO Art. 1310700				ZF TE-ML 03E, 05F, 06K, 17E, 21F, Ford M2C-134D, CNH MAT 3525, MF M-1135, M-1143, M-1145, John Deere JDM 20A/C, Allison C3/C4, Caterpillar TO-2, VOLVO WB 101, Fiat, NH 410B, NH 420A, Case MS 1205, 1206, 1207

> RAVEDDE COMMERCIAL VEHICLES ENGINE OILS / TRACTOR AND OFF-HIGHWAY LUBRICANTS / ATF — TRANSMISSION FLUIDS FOR COMMERCIAL VEHICLE

## MOTOBIKE / MOTOGEAR / FORKOIL / APPLIANCES

	C	lassificatio	ns	
Product name	SAE	API	Specifica- tion	Description / Features
RAVENOL Motobike 4-T Ester Art. 1171101	5W-30	SM	JASO MA, MA2	High performance fully synthetic motor oil with ester additive to meet the demanding requirements of motorcycle engines with wet clutches or oil lubricated clutches.
				JASO MA2 T903:2006, Yamaha, Kawasaki, Honda, Aprilia, BMW, Suzuki, Ducati, Triumph, Moto-Guzzi
RAVENOL Motobike 4-T Ester Art. 1171102	5W-40	SM	JASO MA, MA2	High performance fully synthetic motor oil with ester additive to meet the demanding requirements of motorcycle engines with wet clutches or oil lubricated clutches.
				JASO MA2 T903:2006, Yamaha, Kawasaki, Honda, Aprilia, BMW, Suzuki, Ducati, Triumph, Moto-Guzzi
RAVENOL Motobike 4-T Ester Art. 1172111	10W-30	SM	JASO MA, MA2	High performance fully synthetic motor oil with ester additive to meet the demanding requirements of motorcycle engines with wet clutches or oil lubricated clutches.
				JASO MA2 T903:2006, Yamaha, Kawasaki, Honda, Aprilia, BMW, Suzuki, Ducati, Triumph, Moto-Guzzi
RAVENOL Motobike 4-T Ester Art. 1172112	10W-40	SM	JASO MA, MA2	High performance fully synthetic motor oil with ester additive to meet the demanding requirements of motorcycle engines with wet clutches or oil lubricated clutches.
				JASO MA2 T903:2006 M049RAV112, Yamaha, Kawasaki, Honda, Aprilia, BMW, Suzuki, Ducati, Triumph, Moto-Guzzi
RAVENOL Motobike 4-T Ester Art. 1171103	10W-50	SM	JASO MA, MA2	High performance fully synthetic motor oil with ester additive to meet the demanding requirements of motorcycle engines with wet clutches or oil lubricated clutches.
				JASO MA2 T903:2006, Yamaha, Kawasaki, Honda, Aprilia, BMW, Suzuki, Ducati, Triumph, Moto-Guzzi
RAVENOL Motobike 4-T Ester Art. 1171104	10W-60	SM	JASO MA, MA2	High performance fully synthetic motor oil with ester additive to meet the demanding requirements of motorcycle engines with wet clutches or oil lubricated clutches.
				JASO MA2 T903:2006, Yamaha, Kawasaki, Honda, Aprilia, BMW, Suzuki, Ducati, Triumph, Moto-Guzzi
RAVENOL Motobike 4-T Mineral	15W-40	SL	JASO MA, MA2	High performance mineral motor oil with ester additive to meet the demandi requirements of motorcycle engines with wet clutches or oil lubricated clutch
Art. 1173121				JASO MA2 T903:2006, Yamaha, Kawasaki, Honda, Aprilia, BMW, Suzuki, Ducati, Triumph, Moto-Guzzi
RAVENOL Motobike 4-T Ester Art. 1172113	15W-50	SM	JASO MA, MA2	High performance semi-synthetic motor oil with ester additive to meet the demanding requirements of motorcycle engines with wet clutches or oil lubricated clutches.
				JASO MA2 T903:2006, Yamaha, Kawasaki, Honda, Aprilia, BMW, Suzuki, Ducati, Triumph, Moto-Guzzi
RAVENOL Motobike 4-T Mineral Art. 1173123	20W-40	SM	JASO MA, MA2	High performance fully synthetic motor oil with ester additive to meet the demanding requirements of motorcycle engines with wet clutches or oil lubricated clutches.
				JASO MA2 T903:2006 M049RAV123, Yamaha, Kawasaki, Honda, Aprilia, BMW, Suzuki, Ducati, Triumph, Moto-Guzzi
RAVENOL Motobike 4-T Mineral Art. 1173122	20W-50	SM	JASO MA, MA2	High performance fully synthetic motor oil with ester additive to meet the demanding requirements of motorcycle engines with wet clutches or oil lubricated clutches.
				JASO MA2 T903:2006 M049RAV122, Yamaha, Kawasaki, Honda, Aprilia, BMW, Suzuki, Ducati, Triumph, Moto-Guzzi
RAVENOL Motobike V-Twin SAE 20W-50	20W-50			High performance 3 in 1 fullysynthetic lubricant for motor, gear and crankshaft. Specifically designed for use in cruiser and chopper motorcycles.
Fullsynth. Art. 1171105				BMW Cruiser Motorcycles, Harley Davidson 62600005, 62600031, Honda 08C35-A251M01, 08C35-A251L01, Indian Motorcycles, Victory Motorcycle Yamalube LUB20W50AP04, LUB20W50AP12, Triumph Motorcycles, Moto Guzzi Motorcycles, Suzuki V-Twin Motor Oil
RAVENOL Motobike V-Twin SAE 20W-50	20W-50			High performance 3 in 1 mineral lubricant for motor, gear and crankshaft.  Specifically designed for use in cruiser and chopper motorcycles.
Mineral Art. 1173105				BMW Cruiser Motorcycles, Harley Davidson 62600005, 62600031, Honda 08C35-A251M01, 08C35-A251L01, Indian Motorcycles, Victory Motorcycles Yamalube LUB20W50AP04, LUB20W50AP12, Triumph Motorcycles, Moto Guzzi Motorcycles, Suzuki V-Twin Motor Oil
RAVENOL Fork Oil Ultra Light 2,5W,	2,5W 5W			Fully synthetic fork oil based on ester oils for all forks of high performance motorcycles, especially for SHOWA and USD-forks.
Light 5W Art. 1182101, Art. 1182102	5			Yamaha, Kawasaki, Honda, Aprilia, BMW, Suzuki, Ducati, Triumph, Moto- Guzzi

## MOTOBIKE / MOTOGEAR / FORKOIL / APPLIANCES

	Classifications				
Product name	SAE	API	Specifica- tion	Description / Features	
RAVENOL Fork Oil	10W			Mineral oil based fork oil for all forks of road and off-road motorcycles.	
Medium 10W, Heavy 15W, Very Heavy 20W Art. 1182104, Art. 1182105, Art. 1182106	15W 20W			Yamaha, Kawasaki, Honda, Aprilia, BMW, Suzuki, Ducati, Triumph, Moto-Guzzi	
RAVENOL Motogear Art. 1250050	75W-90	GL-4		Fully synthetic low friction gear oil with especially formulation for extremely stressed manual transmission and rear axles.	
RAVENOL Motogear Art. 1250055	80W-90	GL-4		Transmission oil based on mineral oil with effective additives for manual transmissions.	
RAVENOL Motogear Art. 1250070	80W-90	GL-5		Hypoid transmission oil based on mineral oil with special high pressure additions for manual transmissions.	
RAVENOL Motogear Art. 1250100	10W-30	GL-4		Semi-synthetic special multigrade gear oil, especially for air and water-cooled 2-and 4- stroke machines with a separate gear lubrication.	
				УАМАНА	
RAVENOL Motogear Art. 1250101	10W-40	GL-4		Semi-synthetic special multigrade gear oil based on synthesis technology and special esters for easily switching also under extremely hard operating conditions.	
RAVENOL QUAD 4T	10W-40	SL	JASO MA2	Semi-synthetic motoroil for Quads and ATV.	
Art. 1152160				KAWASAKI, YAMAHA, BOMBARDIER, SUZUKI	
RAVENOL				Special axle oil developed for Quads and ATV with an integrated wet brake.	
Quadrogear Art. 1250200				KAWASAKI, YAMAHA, BOMBARDIER, SUZUKI	
RAVENOL Air Filter Oil Spray Art. 1360301				Spray oil for all foam material air filters of off-road and street motorcycles and Quads.	
RAVENOL Air Filter Clean Spray Art. 1360302				Degreases and cleans all foam material air filters of off-road and street motor-cycles and Quads thoroughly.	
RAVENOL Kettenöl Off Road Spray Art. 1360303				Especially for chain lubrication of off-road motorcycles and Quads.	
RAVENOL Kettenöl Reiniger Spray Art. 1360304				Degreases and cleans motorcycle chains as well as the chains of other vehicles thoroughly.	
RAVENOL Carb Reiniger Spray Art. 1360305				Cleans carburetors in the suction and throttle valve area thoroughly.	
RAVENOL Ketten-Spray Art. 1360032				Lubricating spray for chains.	



# **MOTOBIKE / MOTOGEAR / FORKOIL / APPLIANCES / 2- AND 4-STROKE ENGINE OILS / MARINE OILS**

## 2- AND 4-STROKE ENGINE OILS

		Classification	s	
Product name	SAE	API	Specifica- tion	Description / Features
RAVENOL MPS Motocross Powersynth 2T		TC ISO-L- EGD	JASO FD	High quality fully synthetic two-stroke engine oil with special esters and Polyisobutylene (PIB) for air – and water cooled 2-stroke engines. Suitable for separate lubrication systems and self-mixing systems.
Art. 1144110				KTM, Beta, GasGas, Husqvarna, Yamaha, Kawasaki, Honda, Suzuki
RAVENOL Vollsynthetisches 2-Taktöl VSZ		TD ISO-L- EGD	JASO FD	Fully synthetic, high-quality two-stroke oil with special esters and Polyisobutylene (PIB) for air-and water-cooled 2-stroke engines. Suitable for separate lubrication and self-mixing systems. Recommended mixture: max. 1:100.
Art. 1151100				JASO 049RAV151, Piaggio SI
RAVENOL Selfmix 2T Art. 1153100		TB ISO-L-EGB	NMMA TC- W JASO FB	Mineral motor oil for self-mixing systems and separate lubrication. Recommended mixture: 1:50.
				JASO 049RAV155, Husqvarna, Stihl, Partner, McCulloch, Jonsered, Oleo-Mac, Poulan, Maruyama, Dolmar, Oregon, Makita, Ryobi, Hitachi
RAVENOL Zweitakt-Motorenöl nicht selbstmischend Art. 1153101		SA		Mineral non-miscible motor oil for 2-stroke engines. For use at low and high temperatures, guarantees functional lubrication.
RAVENOL SCOOTER Fullsynth. 2-Taktöl Art. 1151150		TD ISO-L-EGD	JASO FD	Fully synthetic miscible motor oil with special esters and Polyisobutylene (PIB)for 2-stroke engines with high rotation speed for scooters. Suitable for separate lubrication and self-mixing systems. Recommended mixture: max. 1:100.
				JASO 049RAV153, Aprilia, Honda, Kymco, Peugeot, Piaggio, Suzuki, Vespa, Yamaha
RAVENOL SCOOTER Teilsynth. 2-Taktöl Art. 1152150		TC ISO-L-EGC	JASO FC	High quality "self-mixing" two-stroke motor oil with special esters and Polyisobutylene (PIB) for 2-stroke engines and scooters. Low Smoke. Suitable for separate lubrication and self-mixing systems. Recommended mixture: max. 1:75.
				JASO 049RAV150
RAVENOL SCOOTER Mineral 2-Taktöl		TB ISO-L-EGB	JASO FB	Mineral motor oil for 2-stroke gasoline engines and scooters. Suitable for separate lubrication and self-mixing systems. Recommended mixture: max. 1:50.
Art. 1153150				JASO 049RAV156, Aprilia, Honda, Kymco, Peugeot, Piaggio, Suzuki, Vespa, Yamaha
RAVENOL SCOOTER 4-Takt	10W-40	SL		Semi-synthetic high performance green colored motor oil for 4-stroke small engines.
Teilsynth. Art. 1152155				Yamaha, Honda, Aprilia, Suzuki, Kawasaki, Peugeot, Arctic Cat, Bombardier, Argo, Dinli, Polaris
RAVENOL Snowmobiles		ISO-L-EGD	JASO FD	Fully synthetic motor oil for snowmobiles. Recommended mixture: max. 1:100.
Fullsynth. 2-Takt Art. 1151310				JASO 049RAV154, Yamaha, Suzuki, Bombardier, Kawasaki, Arctic Cat
RAVENOL		TC ISO-L-EGC	JASO FC	Semi-synthetic motor oil for snowmobiles. Recommended mixture: max. 1:75.
Snowmobiles Teilsynth. 2-Takt Art. 1152310				JASO 049RAV152, Yamaha, Suzuki, Bombardier, Kawasaki, Arctic Cat, Ski- Doo, Polaris
RAVENOL		TB ISO-L-EGB	JASO FB	Mineral motor oil for snowmobiles. Recommended mixture: max. 1:50.
Snowmobiles Mineral 2-Takt Art. 1153310				JASO 049RAV157, Yamaha, Suzuki, Bombardier, Kawasaki, Arctic Cat, Ski- Doo, Polaris

## 2- AND 4-STROKE ENGINE OILS

		Classification	15	
Product name	SAE	API	Specifica- tion	Description / Features
RAVENOL				Fully synthetic 4-stroke motor oil, especially for 4-stroke snowmobiles.
Snowmobiles 4-Takt Fullsynth Art. 1151311				Yamaha, Suzuki, Bombardier, Kawasaki, Arctic Cat, Ski-Doo, Polaris
RAVENOL Schneefräse 4-Takt Art. 1151106	0W-30	SL	ACEA A3/B4	Fully synthetic 4-stroke motor oil, especially for 4-stroke snow blowers.
				MTD, Honda, TORO, Yard-Man, CubCadet, Briggs&Stratton, McCulloch, Craftsman, Murray, Ariens, Caiman, Canadiana, Husqvarna, Partner, Snapper, Stiga, Swisher, White Outdoor
RAVENOL Schneefräse 4-Takt	5W-30	SM/SL	ACEA A5/B5	High performance fully synthetic 4-stroke motor oil, especially for 4-stroke snowblowers.
Art. 1151105				MTD, Honda, TORO, Yard-Man, CubCadet, Briggs&Stratton, McCulloch, Craftsman, Murray, Ariens, Caiman, Canadiana, Husqvarna, Partner, Snapper, Stiga, Swisher, White Outdoor
RAVENOL	30	CD/SF		Mineral monograde 4-stroke motor oil specially developed for lawn-mower.
4-Takt Gardenoil HD Art. 1113301				MB 227.0, MIL-L-46152 B, MIL-L-2104 D, Husqvarna, Honda, Stihl, Oleo-Mac, CCMC G4



## Marine oils

		lassification	ıs	
Product name	SAE	API	Specifica- tion	Description / Features
RAVENOL	10W-40	SL	tion	Motor oil for use in marine gasoline engines.
MARINEOIL PETROL Art. 1162200, Art. 1163200, Art. 1163210	15W-40 20W-50			VOLVO Penta AB, Mercruiser, Yanmar, Kohler
RAVENOL	10W-40	CI-4/CF	ACEA: E7,	Motor oil for use in marine diesel engines.
MARINEOIL DIESEL SHPD Art. 1162100, Art. 1163100, Art. 1163110	15W-40 20W-50		В4	VETUS DEUTZ, Steyr, MTU, VOLVO PENTA, Caterpillar, IVECO, MAN, Mercruiser, PERKINS, NANNI Diesel, Yanmar, Detroit Diesel, SULZER, SKL
RAVENOL		GL-5		Gear oil for use in marine transmissions.
MARINE Gear Lube Art. 1233100				OMC, Volvo Penta, Mercruiser, Yanmar
RAVENOL				Hydraulic oil for lubricating hydraulics in marine equipment.
MARINE PowerTrim&Steering Fluid Art. 1234100				OMC, Volvo Penta, Mercruiser, Yanmar
RAVENOL Outboardoel 2T Fullsynth. Art. 1151200		TD	NMMA TC-W3	Fully synthetic specifically formulated Outboard 2-stroke motor oil with special esters and Polyisobutylene (PIB). Perfect lubrication and wear protection due to special Low-Ash additives. Suitable for separate-lubrication and self-mixing systems. Recommended mixture: max. 1:100.
				NMMA TC-W3® RL-90001G, Yamaha, Suzuki, Tohatsu, Johnson, Evinrude, Mercury and Selva
RAVENOL Outboardoel 2T Teilsynth. Art. 1152200		TC	NMMA TC-W3	Semi-synthetic specifically formulated Outboard 2-stroke motor oil with special esters and Polyisobutylene (PIB). Perfect lubrication and wear protection due to special Low-Ash additives. Suitable for separate-lubrication and self-mixing systems. Recommended mixture: max. 1:75.
				NMMA TC-W3® RL-29018F, Yamaha, Suzuki, Tohatsu, Johnson, Evinrude, Mercury and Selva
RAVENOL Outboardoel 2T Mineral Art. 1153200		ТВ	NMMA TC-W3	Mineral specifically formulated Outboard 2-stroke motor oil. Perfect lubrication and wear protection due to special Low-Ash additives. Suitable for separate-lubrication and self-mixing systems. Recommended mixture: max. 1:50.
				NMMA TC-W3® RL-90000G, Yamaha, Suzuki, Tohatsu, Johnson, Evinrude, Mercury and Selva
RAVENOL Outboardoel 4T	10W-30		NMMA FC-W	Semi-synthetic specifically formulated Outboard 4-stroke motor oil acc. to NMMA FC-W.
Art. 1153203				NMMA FC-W® FB-83140K, Mercury Verado, Yamaha, Suzuki, Honda, Johnson/Evinrude, Tohatsu/Nissan
RAVENOL Outboardoel 4T	10W-40		NMMA FC-W	Semi-synthetic specifically formulated Outboard 4-stroke motor oil acc. to NMMA FC-W.
Art. 1153204				NMMA FC-W® FB-83139K, Mercury Verado, Yamaha, Suzuki, Honda, Johnson/Evinrude, Tohatsu/Nissan

## Marine oils

	C	lassification	ıs	
Product name	SAE	API	Specifica- tion	Description / Features
RAVENOL	15W-40		NMMA	Mineral specifically formulated Outboard 4-stroke motor oil acc. to NMMA FC-W.
Outboardoel 4T Art. 1153205			FC-W	NMMA FC-W® FB-83138, Mercury Verado, Yamaha, Suzuki, Honda, Johnson/ Evinrude, Tohatsu/Nissan
RAVENOL Outboardoel 4T	25W-40		NMMA FC-W	Mineral specifically formulated Outboard 4-stroke motor oil acc. to NMMA FC-W.
Art. 1153207				NMMA FC-W® FB-80812K, Mercury Verado, Yamaha, Suzuki, Honda, Johnson/ Evinrude, Tohatsu/Nissan
RAVENOL Watercraft Teilsynth.		TC ISO-L- EGC	JASO FC, NMMA	Semi-synthetic motor oil for outboard engines in water vehicles. Recommended mixture: max. 1:75
2- Takt Art. 1152210			TC-W3	NMMA TC-W3® RL-30010H, Yamaha CE 50S, Mercury
RAVENOL Watercraft Mineral		TB ISO-L- EGB	NMMA TC-W3	Mineral motor oil for outboard engines in water vehicles. Recommended mixture: max. 1:50
2-Takt Art. 1153210				NMMA TC-W3® RL-29901H
RAVENOL Watercraft Fullsynth. 2- Takt		TD ISO-L- EGD	JASO FC, NMMA	Fully synthetic motor oil for outboard engines in water vehicles. Recommended mixture: max. 1:100.
Art. 1151210			TC-W3	NMMA TC-W3® RL-29019G
RAVENOL Watercraft 4-Takt		SG	NMMA FC-W	Fully synthetic motor oil for 4-stroke outboard engines in fresh water cooled 4-stroke water vehicle engines.
Art. 1151211				Mercury Verado, Yamaha, Suzuki, Honda, Johnson/Evinrude, Tohatsu/Nissan
RAVENOL MARINE 830 TBN8	30	СС	MIL-L-2104A	Mineral diesel engine oil used in slowly running crosshead diesel engines and as an engine oil in easy loaded engines of the coasting and inland navigation.
Art. 1163001				DEF 2101D, FZG 8
RAVENOL MARINE 840 TBN8	40	СС	MIL-L-2104A	Mineral diesel engine oil used in slowly running crosshead diesel engines and as an engine oil in easy loaded engines of the coasting and inland navigation.
Art. 1163002				DEF 2101D, FZG 8
RAVENOL MARINE 1230 TBN12 Art. 1163010	30	CF	MIL-L-2104C	Mineral diesel engine oil used for high and medium speed marine diesel engines with or without turbo-charging. This oil can also be used in shipboard transfer boxes due to its load-carrying properties.
				DEF STAN 91-22/2
RAVENOL MARINE 1240 TBN12 Art. 1163011	40	CF	MIL-L-2104C	Mineral diesel engine oil used for high and medium speed marine diesel engines with or without turbo-charging. This oil can also be used in shipboard transfer boxes on boats.
				DEF STAN 91-22/2
RAVENOL MARINE 1630 TBN16 Art. 1163020	30	CF	MIL-L-2104C	Mineral diesel engine oil used for high and so-called « medium speed » marine diesel engines with or without turbo-charging. This oil can also be used in shipboard transfer boxes on boats.
				DEF STAN 91-22/2
RAVENOL MARINE 1640 TBN16 Art. 1163021	40	CF	MIL-L-2104C	Mineral diesel engine oil used for high and so-called « medium speed » marine diesel engines with or without turbo-charging. This oil can also be used in shipboard transfer boxes on boats.
				DEF STAN 91-22/2



Product name	ISO VG	Class	ification	Description / Features
1 Todact Harrie		Spec	ification	Description / Teatures
RAVENOL Hydrauliköl TS	10, 15,	HLP	DIN 51	Mineral hydraulic oil. Wide range of industrial applications.
Art. 1323101,	22, 32, 46, 68,		524 Teil 2	Vickers-Pumpentest, DENISON HF-2, HF-0, MIL-H 24 459, AFNOR NFE 48 603 HM, HV, SIS SS
Art. 1323102,	100			155434, Denison Filterability TP 02100, Hoesch HWN 2333, U.S. Steel 126 u. 127, CETOP RP 91 H (HM, HV), Sperry Vickers M-2950-S u. I-286-S, FZG 12, Cincinnati Milacron P-68, 69, 70,
Art. 1323103, Art. 1323104,				MIL-H 24 459, Eickhoff, Voith
Art. 1323104, Art. 1323105,				
Art. 1323106,				
Art. 1323107				
RAVENOL Hydrauliköl TSX	15, 22,	HVLP	DIN 51	Mineral hydraulic oil with high viscosity index (VI). Excellent for heavy loaded hydraulic
Art. 1323202,	32, 46, 68,		524 Teil 3	plants in industry, earth moving machinery and agricultural machines.
Art. 1323203, Art. 1323204,	100			ISO 6743/4-HV, FZG 12, Sperry Vickers M-2950-S, 1-286-S, Vickers Vane Pump, Denison HF-1, HF-0, HF-2, Cincinatti Milacron P68 (HM-32), P69 (HM-68), P70 (HM-46), CETOP RP
Art. 1323204, Art. 1323205,				91H-HV, General Motors LH-04-1, LH-06-1, LH-15-1, AFNOR 48 603 HV, US Steel 136, 127
Art. 1323206,				
Art. 1323207				
RAVENOL	22, 32,	HLPD	DIN 51	Hydraulic oil HLPD for use in agricultural, construction and plant machinery.
Hydrauliköl HLP-D	46		524 Teil 2	
Art. 1323303, Art. 1323304,			ICH Z	MAN N 698, DENISON HF-O
Art. 1323304, Art. 1323305				
RAVENOL	32, 46,	HLP	DIN 51	High quality zinc-and ash-free hydraulic oil, alloyed on sulfur / phosphorus-basis, which
Hydraulikoel TS AF 32	68		524	has been designed specifically for use in the metal industry.
Art. 1323124,			Teil 2	SEB 181.222, 181.226, Vickers-Pumptest, Timken-Test acc. to DIN E 51434, MAN N 698,
Art. 1323125, Art. 1323126				FZG-Test A 8,3/90: 12. Loadstep
7.1.1.1525.120	32, 46,	HEES	VDMA	Bio-hydraulic oil based on esters. Use in hydraulic systems of sewage treatment plants,
RAVENOL Bio-Hydrauliköl (auf Esterbasis)	68	IILLS	24568	dredgers and dredging, hydraulic lock and river weirs, pipes and tunneling, hydraulic pow-
Art. 1321104,				er packs in the woods and fields, earth moving equipment in water, forestry equipment.
Art. 1321105,				
Art. 1321106				ISO 15380

## INDUSTRIAL OILS / SPECIALTIES

Product name	ISO VG	Classifications Specifications		Description / Features
RAVENOL DOT 4		ISO 4925	FMVSS 116	Brake fluid for all vehicles with ABS-Characteristics.
Art. 1350601			DOT 4	SAE J1704
RAVENOL DOT 5.1		ISO 4925	FMVSS 116 DOT	Brake fluid for all vehicles with ABS-Characteristics.
Art. 1350602			5.1	SAE J1704
RAVENOL Calibration Fluid Art. 1350130		ISO 4113		Test fluid for the calibration of diesel injection pump and corrosion protection for inside conservation of fuel systems.
				SAE J 967D, MB 133.0, MTU
RAVENOL Calibration Fluid 2.5 Art. 1350131		ISO-Norm 4113-CV- AW		Test fluid for the calibration of diesel injection pumps from Bosch (VS 15665-OL-CV), MTU, MAN and Volkswagen, as corrosion preventive oil for the internal preservation or conservation of fuel systems from MTU, Lucas CAV, MB DBL 6513.

INDUSTRIAL OILS / SPECIALTIES

Product name	ISO VG		sifications cifications	Description / Features
RAVENOL Getriebeöl CLP Art. 1332106, Art. 1332107, Art. 1332108, Art. 1332109, Art. 1332110, Art. 1332111, Art. 1332112	68, 100, 150, 220, 320, 460, 680		DIN 51 517 Teil 3, FZG 12, US Steel 224	CLP Gearoil for the use in industrial gearboxes.  CLP 150: , AGMA 9005-D94, Cincinnati Milacron, Clean Panel Coker, CLP 320: Eickhoff, LOVAT LOV-204, S-200 Oxidation Tubes
RAVENOL Kompressorenöl VDL Art. 1330100, Art. 1330101, Art. 1330102	100, 150, 220	VDL 51 506		Use in stationary and mobile compressors, lubrication of engines and diesel engines.  ATLAS COPCO, ABAC, ALUP, CompAir, FIAC, FINI, KAESER
RAVENOL Wärmeträgeröl 32 Art. 1330210				Mineral heat transfer oil.
RAVENOL Traföl 1000P Art. 1330201		IEC 60296 (03)		Insulating oil for transformers and switches.
RAVENOL Gatteröl Art. 1350370	320			Adhesive-capable lubricating oil for use in (open) bearings from metal finishing industries, as well as textile, packaging and web presses.
RAVENOL Kältemaschinenöl K Art. 1331104, Art. 1331105, Art. 1331106	32, 46, 68	DIN 51 503 group KAA		Compressor oil for the lubrication of refrigerating machines.
RAVENOL Kältemaschinenöl PAO Art. 1331255, Art. 1331256, Art. 1331259	46, 68, 220	DIN 51 503 group KAA/KC/ KE		Refrigeration oil for use in all types of refrigeration compressors such as piston, screw and centrifugal compressors. For dry and flooded evaporator.
RAVENOL	15, 22, 32,			Compressor oil for the lubrication of refrigerating machines.
Kältemaschinenöl POE Art. 1331202, Art. 1331203, Art. 1331204, Art. 1331205, Art. 1331206, Art. 1331207	46, 68, 100			HFC 134a, R 404a, R 507
RAVENOL Umlauföl NB-E	22, 32, 46,			Recirculating oil.
Art. 1333003, Art. 1333004, Art. 1333005, Art. 1333006, Art. 1333007, Art. 1333008, Art. 1333009, Art. 1333010, Art. 1333011	68, 100, 150, 220, 320, 460			DIN 51 524 Part 1, Cat. HL, DIN 51 517 Part 2, Cat. CL, DIN 51 506 VBL/VCL
RAVENOL	32, 46, 68,	ISO 6743-	DIN 51 506 VC	Vacuum pump oil.
Vakuumpumpenöl ISO VG Art. 1330704, Art. 1330705, Art. 1330706, Art. 1330707, Art. 1330708	100, 150	3 DVA & DVC		Vickers Vane Pump, AFNOR NF E 48-603 (HM, HV), Leybold-Heraeus 175, Edwards Ultragrade 19, Alcatel 100, 119 and 120, PVR Rotant, Becker vacuum pumps, Hyvac 93055, Ulvac 100, BUSCH VM and VMH, Balzers P3, Kinney Type A, Beckmann 19, Fisherbrand 19, SAVANT SPO-1
RAVENOL Getriebeöl Glycosynth Gear Art. 1332308, Art. 1332309, Art. 1332310	150, 220, 320		DIN 51 517 Teil 3, FZG 12	Synthetic industrial gear oil for the lubrication of heavy loaded mechanical gearboxes and bearings with a high thermal load.
RAVENOL Bettbahnöl Art. 1350374, Art. 1350375, Art. 1350376, Art. 1350377, Art. 1350378	32, 46, 68, 150, 220		DIN 51 502 CGLP	Way-sliding oil for heavy-duty performance.
RAVENOL Turbinenöl T	32, 46, 68,	ISO 6742.0	DIN 51 515 L-TD	High quality turbine oil.
Art. 1330354, Art. 1330355, Art. 1330356, Art. 1330357	100	6743-0		BS 489
RAVENOL Sägekettenöl S 85 Art. 1350300				Chainsaw oil.
RAVENOL Super Sägekettenöl				Readily biodegradable chainsaw oil.  «Blauer Engel» acc. to RAL-ZU 48, KWF-Test with test-no. 4934.
Art. 1350301 RAVENOL Feinmechaniköl				Universal fluid for bicycles, sewing machines, household and office applica-
Art. 1350360				tions, locks, tool, etc

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Product name	NLGI	Specification DIN 51 502	Description / Features
RAVENOL Mehrzweckfett OML	2	K2K-30	Lithium saponified multipurpose grease for the lubrication of lightly loaded bearings and all machine parts.
Art. 1340101			MB 267.0, ISO 6743: ISO-L-XCCEA2
RAVENOL Mehrzweckfett mit Graphit Art. 1340102	2	KPF2K-30	Lithium saponified multipurpose grease with finely divided graphite to increase the loading at very high temperatures. Designed for applications exposed to high temperatures and shock loadings.
			ISO 6743: ISO-L-XCCFB2
RAVENOL Mehrzweckfett mit MoS2 Art. 1340103	2	KPF2K-30	Lithium saponified grease with molybdenum sulphide MoS2 for lubricating hard to reach places, and reciprocating machine parts for chassis lubrication. Salt water resistant.
			ISO 6743: ISO-L-XCCIB2
RAVENOL Super EP-Langzeitfett	2	KP2K-30	Lithium saponified grease for long-term lubrication of heavily loaded plain and rolling bearings, even under the influence of moisture, vibration and shock loads.
Art. 1340104			ISO 6743: ISO-L-XCCFB2, LOVAT LOV-204
RAVENOL LKW FETT BLAU Art. 1340117	2	KP2N-30	Blue colored lithium saponified multipurpose grease based on mineral oil for the lubrication of heavily loaded plain and rolling bearings of trucks and construction equipment, even under the influence of moisture, vibration and shock loads.
			ISO 6743: ISO-L-XCDIB2,VOLVO STD "Lubricating grease 97720", MAN 283 Li-P2, MB 267.0
RAVENOL Wälzlagerfett LI-86 Art. 1340105	3	K3K-30	Lithium saponified bearing grease for the lubrication of high-speed roller and ball bearings. Especially for chassis lubrication, lubrication of construction equipment and agricultural equipment. Highly resistant to dirt and water.
			ISO 6743: ISO-L-XCCFA3
RAVENOL Amber Getriebefließfett	0	GP0K-30	Lithium saponified multipurpose grease for the lubrication of heavily loaded trucks and trailers, roller and ball bearings in the industrial sector at low speeds.
Art. 1340106			ISO 6743: ISO-L-XCCFB0
RAVENOL KFZ-Fließfett ZSA	00	GP00K-30	Lithium soap EP grease for central lubrication systems mobile. It is recommended for FF VOGEL central lubrication systems ZSA, Mercedes-Benz and MAN.
Art. 1340107			ISO 6743: ISO-L-XCCEB00, MAN 283 Li-P 00/000, MB 264.0, Willi Vogel
RAVENOL Kettenfließfett	0	GP0K-30	Lithium saponified multipurpose grease for the lubrication of chains.  ISO 6743: ISO-L-XCCFB0
Art. 1340114			
RAVENOL Kugellager-Vaselinfett Art. 1340113	2	K2K-30	Lithium saponified multipurpose grease for the lubrication of ball bearings.  ISO 6743: ISO-L-XCCEA2
RAVENOL	2	K2K-30	Lithium saponified multi-purpose grease to protect contacts and metal parts from
Polfett-Säureschutzfett	-	NEIC 30	aggressive acids.
Art. 1340115			ISO 6743: ISO-L-XCCEA2
RAVENOL Hochleistungsfett mit MoS-2	2	KPF2K-30	Lithium saponified grease with high performance molybdenum sulphide for lubricating reciprocating machine parts and constant velocity joints. Salt water resistant.
Art. 1340108			ISO 6743: ISO-L-XCCIB2
RAVENOL Kupferpaste Art. 1340109	1 - 2	KF1,5U-20	Lithium saponified grease with copper powder as a solid lubricant additive for the lubrication of screw and bushings in drill pipes.
			ISO 6743: ISO-L-XBGEB1-2, Operational temperature range -20°C to +1100°C
RAVENOL Extreme Pressure Grease EPG 3	3	KP3K-30	Lithium saponified universal high-performance grease for industrial and automotive applications. Used as a lubricant and bearing grease to lubrication points of motor vehicles, equipment, machinery, conveyor systems, construction equipment, etc
Art. 1340127			ISO 6743: ISO-L-XCCEB3
RAVENOL Hot Red Grease HRG 1 Art. 1340120	1	KP1P-35	Red colored lithium saponified universal high-performance grease for industrial and automotive applications. Used as a lubricant and bearing grease to lubrication points of motor vehicles, equipment, machinery, conveyor systems, construction equipment, etc.
			ISO 6743: ISO-L-XCEEB1
	ALC: N	1.6	

## GREASES

Product name	NLGI	Specification DIN 51 502	Description / Features
RAVENOL Hot Red Grease HRG 2 Art. 1340121	2	KP2P-35	Red colored lithium saponified high performance grease for the lubrication of high pressure loaded roller and plain bearings at elevated storage temperatures. Use for the wheel bearing lubrication of commercial vehicles and for high-speed passenger car wheel bearings.
			ISO 6743: ISO-L-XCEEB2
RAVENOL Hot Red Grease HRG 3 Art. 1340122	3	KP3P-25	Red colored lithium saponified high performance grease for the lubrication of high pressure loaded roller and plain bearings at elevated storage temperatures. Use for the wheel bearing lubrication of commercial vehicles and for high-speed passenger car wheel bearings.
			ISO 6743: ISO-L-XBEEB3
RAVENOL Arctic Green Grease AGG 2 Art. 1340126	2	KPE2K-60	Green colored lithium saponified high performance grease based on synthetic/native esters, synth. Hydrocarbons and high quality mineral oils. Suitable for the lubrication of high pressure loaded roller and plain bearings at very low temperatures.
			ISO 6743: ISO-L-XECEB2
RAVENOL Arctic Tripoid Grease ATG 2 Art. 1340125	2	KPFE2K-60	Lithium saponified high performance grease with molybden disulphide MoS2 based on synthetic/native esters, synth. Hydrocarbons and high quality mineral oils. Suittable for the lubrication of high pressure loaded roller and plain bearings at very low temperatures.
			ISO 6743: ISO-L-XECEB2
RAVENOL Marinefett Art. 1340128	2	KP2K-30	Yellow-green, fluorescent, sea-water resistant lubrication grease with long-term adhesion properties. It is based on a special, calcium soap and a high-viscous synthetic base oil, as well as specifically selected active ingredients to protect against oxidation, rust and corrosion.
			ISO 6743: ISO-L-XCCFB2



## | COOLANTS / WINTER PRODUCTS / CAR CARE PRODUCTS / FUEL ADDITIVES

## Coolants

Product name		Application
RAVENOL TTC Traditional Technology	PROTECT C11	Coolant of yellow-green colour. It provides effective frost and corrosion protection. Application according mixture table.
Coolant Concentrate Art. 1410100		VW TL 774-C (acc. to G11 quality), ASTM D 3306 (USA), BS 6580 (GB), O Norm V 5123 (Austria) JIS K 2234 (Japan), CUNA NC 956-16 (Italy), AFNOR R15-601 (France), SAE J1034, UNE 25-361 (Spain), ASTM D 6210, ASTM D 4985, ASTM D 3306, ASTM D 1384, ASTM D 2570, ASTM D 2809, FORD WSS-M97B51-A, FIAT PARAFLU 11, IVECO 18-1830, CHRYSLER MS 7170
RAVENOL	PROTECT	Coolant of yellow-green colour with frost and corrosion protection premixed to -40°C.
TTC Traditional Technology Coolant Premix -40°C Art. 1410105	C11	VW TL 774-C (acc. to G11 quality), ASTM D 3306 (USA), BS 6580 (GB), O Norm V 5123 (Austria) JIS K 2234 (Japan), CUNA NC 956-16 (Italy), AFNOR R15-601 (France), SAE J1034, UNE 25-361 (Spain), ASTM D 6210, ASTM D 4985, ASTM D 3306, ASTM D 1384, ASTM D 2570, ASTM D 2809, FORD WSS-M97B51-A, FIAT 9.55523, FIAT PARAFLU 11, IVECO 18-1830, CHRYSLER MS 7170
RAVENOL	PROTECT	Coolant of yellow-green colour with frost and corrosion protection premixed to -15°C.
TTC Traditional Technology Coolant Hot Climate -15°C Art. 1410106	C11	VW TL 774-C (acc. to G11 quality), ASTM D 3306 (USA), BS 6580 (GB), O Norm V 5123 (Austria) JIS K 2234 (Japan), CUNA NC 956-16 (Italy), AFNOR R15-601 (France), SAE J1034, UNE 25-361 (Spain), ASTM D 6210, ASTM D 4985, ASTM D 3306, ASTM D 1384, ASTM D 2570, ASTM D 2809, FORD WSS-M97B51-A, FIAT 9.55523, FIAT PARAFLU 11, IVECO 18-1830, CHRYSLER MS 7170
RAVENOL	PROTECT	Coolant of yellow-green colour with frost and corrosion protection premixed to -60°C.
TTC Traditional Technology Coolant COLD CLIMATE -60°C Art. 1410140	C11	VW TL 774-C (acc. to G11 quality), ASTM D 3306 (USA), BS 6580 (GB), O Norm V 5123 (Austria) JIS K 2234 (Japan), CUNA NC 956-16 (Italy), AFNOR R15-601 (France), SAE J1034, UNE 25-361 (Spain), ASTM D 6210, ASTM D 4985, ASTM D 3306, ASTM D 1384, ASTM D 2570, ASTM D 2809, FORD WSS-M97B51-A, FIAT 9.55523, FIAT PARAFLU 11, IVECO 18-1830, CHRYSLER MS 7170
RAVENOL OTC Organic Technology	PROTECT C12+	Coolant of lilac colour. It provides highly effective frost and corrosion protection. Application according mixture table.
Coolant Concentrate Art. 1410110		MAN 324 SNF, MB 325.3, VW/Audi TL 774-D/F (acc. to G12 plus quality), Opel GM 6277M, Opel GM B 040 1065, Ford WSS-M 97 B44D (from model year 1999), FORD 1336797, 1336807, 1365305, Porsche, Mitsubishi 0103044, 0103045, MZ311986, Toyota 08889-00115, 08889-01005, 08889-80014, 08889-80015, 00272-1LLAC, VOLVO 9437650, 9437651, VW G012A8GM1, G012A8FM8, G012A8FM9
RAVENOL	PROTECT	Coolant of lilac colour with frost and corrosion protection premixed to -40°C.
OTC Organic Technology Coolant Premix -40°C Art. 1410112	C12+	MAN 324 SNF, MB 325.3, VW/Audi TL 774-D/F (acc. to G12 plus quality), Opel GM 6277M, Opel GM B 040 1065, Ford WSS-M 97 B44D (from model year 1999), FORD 1336797, 1336807, 1365305, Porsche, Mitsubishi 0103044, 0103045, MZ311986, Toyota 08889-00115, 08889-01005, 08889-80014, 08889-80015, 00272-1LLAC, VOLVO 9437650, 9437651, VW G012A8GM1, G012A8FM8.
RAVENOL	PROTECT	Coolant of lilac colour with frost and corrosion protection premixed to -15°C.
OTC Organic Technology Coolant Hot Climate -15°C Art. 1410113	C12+	MAN 324 SNF, MB 325.3, VW/Audi TL 774-D/F (acc. to G12 plus quality), Opel GM 6277M, Opel GM B 040 1065, Ford WSS-M 97 B44D (from model year 1999), FORD 1336797, 1336807, 1365305, Porsche, Mitsubishi 0103044, 0103045, MZ311986, Toyota 08889-00115, 08889-01005, 08889-80014, 08889-80015, 00272-1LLAC, VOLVO 9437650, 9437651, VW G012A8GM1, G012A8FM8.



## Coolants

Product name	DDOTECT	Application
RAVENOL HTC Hybrid Technology Coolant Concentrate	PROTECT MB325.0	All year-round coolant of blue colour. It provides highly effective frost and corrosion protection for Mercedes, BMW, Opel, Saab and General Motors engines. Application according mixture table.
Art. 1410120		MB 325.0, VW TL 774-C, MB A000989082510, ASTM D3306, ASTM D4985, ASTM D4340, SAE J1034, NATO S-759, FORD ESE-M978B4H-A, FORD AF Plus, MAN 324, SAAB, GM 1825M, OPEL-GM QL130100, DAF, GM 1899M, GM 93740141, GM 93740140, VW-AUDI-PORSCHE, GM SATURN, ROVER, PORSCHE, John Deere, JAGUAR, BMW 81 22 9 407 454, 83 19 2 211 191, RENAULT, Honda OL999-9011, VW TL 774-C
RAVENOL HTC Hybrid Technology	PROTECT	All year-round coolant of blue colour with frost and corrosion protection premixed to -40°C.
Coolant Premix -40°C Art. 1410121	MB325.0	MB 325.0, MB A000989082510, ASTM D3306, ASTM D4985, ASTM D4340, SAE J1034, NATO S-759, FORD ESE-M978B4H-A, FORD AF Plus, MAN 324, SAAB, GM 1825M, OPEL-GM QL130100, DAF, GM 1899M, GM 93740141, GM 93740140, VW-AUDI-PORSCHE, GM SATURN, ROVER, PORSCHE, John Deere, JAGUAR, BMW 81 22 9 407 454, 83 19 2 211 191, RENAULT, Honda OL999-9011, VW TL 774-C
RAVENOL	PROTECT	All year-round coolant of blue colour with frost and corrosion protection premixed to -15°C
HTC Hybrid Technology Coolant Hot Climate -15°C Art. 1410119	MB325.0	MB 325.0, MB A000989082510, ASTM D3306, ASTM D4985, ASTM D4340, SAE J1034, NATO S-759, FORD ESE-M978B4H-A, FORD AF Plus, MAN 324, SAAB, GM 1825M, OPEL-GM QL130100, DAF, GM 1899M, GM 93740141, GM 93740140, VW-AUDI-PORSCHE, GM SATURN, ROVER, PORSCHE, John Deere, JAGUAR, BMW 81 22 9 407 454, 83 19 2 211 191, RENAULT, Honda OL999-9011
RAVENOL	PROTECT	All year-round coolant of blue colour with frost and corrosion protection premixed to -60°C.
HTC Hybrid Technology Coolant COLD CLIMATE -60°C Art. 1410142	MB325.0	MB 325.0, MB A000989082510, ASTM D3306, ASTM D4985, ASTM D4340, SAE J1034, NATO S-759, FORD ESE- M978B4H-A, FORD AF Plus, MAN 324, SAAB, GM 1825M, OPEL-GM QL130100, DAF, GM 1899M, GM 93740141, GM 93740140, VW-AUDI-PORSCHE, GM SATURN, ROVER, PORSCHE, John Deere, JAGUAR, BMW 81 22 9 407 454, 83 19 2 211 191, RENAULT, Honda OL999-9011
RAVENOL HJC Hybrid Japanese Coolant	PROTECT FL22	Coolant of green colour. It provides highly effective frost and corrosion protection. Application according mixture table.
Concentrate Art. 1410122		Mazda FL22 Coolant, Ford WSSM97B55 (Motorcraft Specialty Green Engine Coolant), Ford VC-10-A2, Nissan Antifreeze Coolant (L250), Nissan KE90299934, KE90299944, 08CLAG010S0 Honda E Coolant, Hyundai Long Life Coolant, Hyundai 07100-00200, 07100-00400, 00232-19010, Mazda 000077508E20, C122CL005A4X, C100CL005A4X
RAVENOL	PROTECT	Coolant of green colour with frost and corrosion protection premixed to -40°C.
HJC Hybrid Japanese Coolant Premix -40°C Art. 1410123	FL22	Mazda FL22 Coolant, Ford WSSM97B55 (Motorcraft Specialty Green Engine Coolant), Ford VC-10-A2, Nissan Anti-freeze Coolant (L250), Nissan KE90299934, KE90299944, 08CLAG010S0 Honda E Coolant, Hyundai Long Life Coolant, Hyundai 07100-00200, 07100-00400, 00232-19010, Mazda 000077508E20, C122CL005A4X, C100CL005A4X
RAVENOL	PROTECT	Coolant of green colour with frost and corrosion protection premixed to -15°C.
HJC Hybrid Japanese Coolant Hot Climate -15°C Art. 1410124	FL22	Mazda FL22 Coolant, Ford WSSM97B55 (Motorcraft Specialty Green Engine Coolant), Ford VC-10-A2, Nissan Anti-freeze Coolant (L250), Nissan KE90299934, KE90299944, 08CLAG010S0 Honda E Coolant, Hyundai Long Life Coolant, Hyundai 07100-00200, 07100-00400, 00232-19010, Mazda 000077508E20, C122CL005A4X, C100CL005A4X
RAVENOL	PROTECT	Coolant of green colour with frost and corrosion protection premixed to -60°C.
HJC Hybrid Japanese Coolant COLD CLIMATE -60°C Art. 1410143	FL22	Mazda FL22 Coolant, Ford WSSM97B55 (Motorcraft Specialty Green Engine Coolant), Ford VC-10-A2, Nissan Antifreeze Coolant (L250), Nissan KE90299934, KE90299944, 08CLAG010S0 Honda E Coolant, Hyundai Long Life Coolant, Hyundai 07100-00200, 07100-00400, 00232-19010, Mazda 000077508E20, C122CL005A4X, C100CL005A4X
RAVENOL LTC Lobrid Technology Coolant	PROTECT C12++	Coolant of lilac colour. It provides highly effective frost and corrosion protection. Application according mixture table. Free of borate, nitrite, amine, phosphate.
Concentrate Art. 1410125		VW TL 774-G (acc. to G12++ quality), MAN 324 Type Si-OAT, MB 325.5, Porsche (from model year 2007) Boxster, Cayman, Cayenne, Panamera, VW G012A8GM1, G012A8GM8, G01A8GM9
RAVENOL LTC Lobrid Technology Coolant	PROTECT C12++	Coolant of lilac colour. It provides highly effective frost and corrosion protection premixed to -40°C. Free of borate, nitrite, amine, phosphate.
Premix -40°C Art. 1410126		VW TL 774-G (acc. to G12++ quality), MAN 324 Type Si-OAT, MB 325.5, Porsche (from model year 2007) Boxster, Cayman, Cayenne, Panamera, VW G012A8GM1, G012A8GM8, G01A8GM9
RAVENOL LTC Lobrid Technology Coolant	PROTECT C12++	Coolant of lilac colour. It provides highly effective frost and corrosion protection premixed to -15°C. Free of borate, nitrite, amine, phosphate.
Hot Climate -15°C Art. 1410127		VW TL 774-G (acc. to G12++ quality), MAN 324 Type Si-OAT, MB 325.5, Porsche (from model year 2007) Boxster, Cayman, Cayenne, Panamera, VW G012A8GM1, G012A8GM8, G01A8GM9
RAVENOL LTC Lobrid Technology Coolant	PROTECT C12++	Coolant of lilac colour. It provides highly effective frost and corrosion protection premixed to -60°C. Free of borate, nitrite, amine, phosphate.
Cold Climate -60°C Art. 1410144		VWTL 774-G (acc. to G12++ quality), MAN 324 Type Si-OAT, MB 325.5, Porsche (from model year 2007) Boxster, Cayman, Cayenne, Panamera, VW G012A8GM1, G012A8GM8, G01A8GM9
RAVENOL LGC Lobrid Glycerin Coolant	PROTECT C13	Longlife coolant of lilac colour. It provides highly effective frost and corrosion protection. Application according mixture table.
Concentrate Art. 1410128		VWTL 774-J (acc. to G13 quality), Volkswagen VW G013A8JM1, G013A8JM8, G013A8JM9, Audi, Skoda and Seat.

## | COOLANTS / WINTER PRODUCTS / CAR CARE PRODUCTS / FUEL ADDITIVES

## Coolants

Product name		Application
RAVENOL	PROTECT	Longlife coolant of lilac colour with frost and corrosion protection premixed to -40°C.
LGC Lobrid Glycerin Coolant Premix -40°C Art. 1410129	C13	VW TL 774-J (acc. to G13 quality), Volkswagen VW G013A8JM1, G013A8JM8, G013A8JM9, Audi, Skoda and Seat.
RAVENOL	PROTECT	Longlife coolant of lilac colour with frost and corrosion protection premixed to -15°C.
LGC Lobrid Glycerin Coolant Hot Climate -15°C Art. 1410130	C13	VW TL 774-J (acc. to G13 quality), Volkswagen VW G013A8JM1, G013A8JM8, G013A8JM9, Audi, Skoda and Seat.
RAVENOL		Ethylene glycol coolant, based on low silicate technology in combination with nitrite and molybdate
HDT Heavy Duty Truck Cool. Concentrate Art. 1410115		ASTM D6210, ASTM D3306, ASTM D4985, Caterpillar EC-1, Cummins CES 14603, Cummins SB 3666132, Detroit Diesel Corporation 7SE298, TMC RP329 Type A
RAVENOL HDT Heavy Duty Truck		Prediluted ethylene glycol coolant, based on low silicate technology in combination with nitrite and molybdate to -40°C
Cool. Premix -40°C Art. 1410116		ASTM D6210, ASTM D3306, ASTM D4985, Caterpillar EC-1, Cummins CES 14603, Cummins SB 3666132, Detroit Diesel Corporation 7SE298, TMC RP329 Type A
RAVENOL Food Grade Antifreeze FGA Art. 1410135		Propylene glycol based antifreeze. Protection up to -50°C. Used in foodstuffs industries, also HVAC (Heating, Ventilation, Air Conditioning) systems.
		NSF Nonfood Compounds Program Registration HT1: Registration-no.: 142387

## WINTER PRODUCTS

Product name	Application
RAVENOL	Screen washer antifreeze concentrate.
Scheibenfrostschutz Konzentrat Art. 1420100	Appropriate for Polycarbonate windscreens, compatible with varnish, appropriate for the use in fan jets
RAVENOL	Screen washer antifreeze. Premixed.
Scheibenfrostschutz -30°C Art. 1420105	Appropriate for Polycarbonate windscreens, compatible with varnish, appropriate for the use in fan jets
RAVENOL Antifrost-Enteiser Art. 1420210	Antifrost de-icer.
RAVENOL Frostschutz for Druckluftbremsen Art. 1430208	Air brake system antifreeze.
RAVENOL Fließverbesserer Art. 1430220	Diesel fuel and fuel oil additive to prevent waxing and plugging at low temperatures. Use according to mixture table.
RAVENOL Türschloss-Enteiser Art. 1430203	Lock de-icer.
RAVENOL Schloßöl Art. 1430207	Effective maintenance oil for door locks.
RAVENOL Glycerin Stift Art. 1440206	For the care of rubber seals on vehicles of all types also used in household, trade and industry.



Product name	Application
RAVENOL	Effective super concentrate for universal cleaning in 10% mixture. Use in pressure washers, according to manufacturer's
Hochdruckreiniger Super Konzentrat Art. 1360006	recommendations.
	Kärcher, Lavor, Nilfisk Alto, Portotecnica, Kränzle, Delvir, Comet.
RAVENOL Hochdruckreiniger-Konzentrat Art. 1360003	Ready to use concentrate for use in pressure washers, according to manufacturer's recommendations. Also for cleaning vehicles and planes in the commercial sector.
	Kärcher, Lavor, Nilfisk Alto, Portotecnica, Kränzle, Delvir, Comet.
RAVENOL Kaltreiniger Art. 1360001	Removes all traces of oil, fats, fuel, clutch and brake abrasion. Cleaner for all kind of engines, mechanical parts etc
RAVENOL Kaltreiniger lösemittelfrei Art. 1360002	Cleaner for all kind of engines, mechanical parts. It quickly penetrates grease, dirt, oil and grime and swiftly removes contaminants. Does not contain solvents.
RAVENOL Nitro-Universal-Verdünnung Art. 1360127	Application to dilute nitro, nitro-combination, chlorinated rubber, air-drying and oven-drying synthetic enamel, as well as air-and oven-drying cellulose lacquer.
RAVENOL Teerentferner Art. 1360004	Cleaner of tar, fats, light oxidation and stains from car lacquer.
RAVENOL Autoshampoo Art. 1360005	Universal concentrated liquid detergent excellent for thoroughly cleaning cars.
RAVENOL destilliertes Wasser Art. 1360010	Special water for antifreeze dilution and use in accumulators.
RAVENOL Glasklar Art. 1360025	Intensive glass cleaner, ideal for all glass and mirrored surfaces both inside and outside. It easily and quickly removes traffic film, dust, dirt, fingerprints, greasy marks and nicotine haze from windows and mirrors and leaves a sparkling, smear-free finish. Also suitable for use in the home on windows, mirrors and tiled surfaces.
RAVENOL Bremsenreiniger (flüssig and Spray) Art. 1360030	A highly effective solvent-blended brake cleaner aerosol for the degreasing and cleaning of brakes, brake linings and clutch parts. Also suitable for the cleaning of electric motors, generators, hydraulic parts and many other metal components. Used by many Motorport Teams - said to leave no white film after use.
RAVENOL Rostlöser MoS2 Spray Art. 1360009	Contains finely dispersed Molybdenum Disulphide solid lubricant for outstanding water displacement, corrosion inhibition and lubricating properties. Relaxes and loosens seized screw connections, displaces water and moisture from ignition contacts and electrical systems. The penetrating nature effectively prevents squeaks and creaks in all types of moving parts.
RAVENOL Cockpit-Spray Art. 1360031	A highly effective silicon-free care spray for the cleaning and maintenance of plastic, artificial and natural leather interior surfaces of all types of motor vehicles.
RAVENOL Ketten-Spray Art. 1360032	A spray lubricant and corrosion protection for all types of high-speed chains. Formulated to effectively penetrate all gaps and dry quickly to provide a stable, odorless lubricating film with high levels of adhesion and water resistance.
RAVENOL Silikon-Spray Art. 1360033	A universal lubricant and slide release agent spray for use on all types of components. Specially developed for the lubrication, care and maintenance of all types of rubber, plastic and metal surfaces and components. The water-resistant and weatherproofing properties make it especially suitable in a marine environment.
RAVENOL Motorstarter-Spray Art. 1360034	A mixture of combustible solvents and compressed gases formulated to make it suitable for use in all petrol and diesel engines in passenger cars, trucks, construction equipment, all types of marine and boat engines, as well as agricultural equipment.
RAVENOL Zweirad-Reiniger Art. 1360058	Cleaner of metal and plastic surfaces of motorcycles, mopeds and bikes.
RAVENOL Insekten-Entferner Art. 1360059	A very high quality spray cleaner for the safe and easy removal of bug and insect contamination on glass, paint, chrome and plastic surfaces. Penetrating formula works even on dried insect residue without damaging paintwork - ideal for use as a pre-wash treatment.
RAVENOL Alu-Felgen-Reiniger intensiv Art. 1360060	A very high quality, phosphate-free alloy wheel cleaner formulated to remove the toughest deposits of brake dust, traffic film, greasy marks and road dirt from alloy wheels and rims, steel wheels, plastic wheel covers as well as engine components etc.
RAVENOL Velour-Reiniger Art. 1360066	High quality, phosphate-free car upholstery cleaner for the effective cleaning of all types of seat fabrics and covers, carpets and floor mats. It is also safe and suitable for use on all types of interior trim and all interior plastic surfaces in the car.
RAVENOL Leder-Reiniger Art. 1360067	A phosphate-free, high quality cleaning agent for all types of leather seats and interior trims in the car. Helps to maintain the suppleness and smoothness of the leather.
RAVENOL Bootsreiniger Art. 1360068	Special cleaner for yachts, boats and watercrafts. Highly effective in removing dirt, oil, grease, soot, nicotine, algae, tree sap, etc. without attacking the surface.

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## | COOLANTS / WINTER PRODUCTS / CAR CARE PRODUCTS / FUEL ADDITIVES

## Car care products

Product name	Application	
RAVENOL Sommerscheiben-Reiniger Art. 1360080	Windshield washer for summer period.	
RAVENOL Natur-Petroleum Art. 1350110	Fluid for kerosene/oil lamp.	
RAVENOL Handreiniger-Paste Art. 1360600	Hand cleaner paste. Effective against heavily soiled hands.	
RAVENOL Autopolitur Art. 1360750	Provides a high-gloss Teflon finish for car, boat and caravan. Suitable for all types of automotive coatings as well as for the chrome, wheels and wheel cleaning. Removes tar, insects, and oxidation and brings the shine back to old paint.	
RAVENOL Ölfasspumpe Art. 1370190	Dispensing telescopic oil hand pump. Fits most drum sizes from 60L – 208L.	
RAVENOL Fettpresse Art. 1370040	Hand operated lever cartrige pump for greases with armor tube.	
RAVENOL Messkanne 2 L Art. 1370054	2Jug cap with measuring bar 2 L.	

## Fuel additives

	Product name	Application
	RAVENOL Petrol Performance Optimizer Premium Art. 1390201	High performance additive, cleans and protects the petrol fuel system.
		TÜV certified reduction of NOx -emission.
	RAVENOL Petrol System Cleaner Art. 1390202	Cleans and protects the injection system from corrosion.
	RAVENOL Petrol Quality Stabilisator Art. 1390203	Improves starting behavior. Corrosion and aging protection during long standstill periods.
	RAVENOL Octane Booster Art. 1390204	Higher performance by increasing octanenumber.
	RAVENOL Diesel Performance Optimizer Premium Art. 1390241	High performance additive, cleans and protects the diesel fuel system.
		TÜV certified reduction of CO and HC-emission.
	RAVENOL Cetane Booster Art. 1390242	Improve the ignition behavior, especially during cold starts.
	RAVENOL Diesel System Cleaner Art. 1390243	Cleans the fuel injection system for low soot combustion.
	RAVENOL Diesel Quality Stabilisator Art. 1390244	Optimized storage stability and antibacterial effect.
ř	RAVENOL Professional Radiator Stop Leak Art. 1390301	seals small leaks, safe and fast.
	RAVENOL Professional Radiator Cleaner Art. 1390302	Cleaning concentrate for the cooling and heating system.
	RAVENOL Professional Engine Cleaner Art. 1390321	Motor cleaning concentrate against black sludge.



