

Quality engineered in Germany

HEAVY DUTY2024/25 **★**







BFL CONCEPT

Become a part of our BFL concept as well.
Our external sales team will be very pleased to advise you!

If you utilise 2, or up to a maximum of 4 different lubricants from our BFL concept, then you can reduce the number of lubricants which need to be utilized in your entire machinery inventory and vehicle fleet.



















COST REDUCTIONS







STORAGE SPACE SAVINGS
USER FRIENDLY





Hydrostar HLP-D Range



OL/TWO-STROKE OILS

	BFL-CONCER		BIODEGRADABLE HYDR. OILS BFL-CONCEPT
Emka Cargo IV-LS 0W20		4	Hydrostar HES
Emka Cargo Extra 5W20			Hydrostar AOH 46
Supergrade BFL Extra 5W30		5	≠ Hydrostar HES GSE Range
Emka Cargo E6 5W30		6	RADIATOR ANTIFREEZE
≭Emka Cargo Plus 5W30			FROST-Stop HDM -38°C
Supergrade BFL Extra 10W30	*	7	FROST-Stop MK12++
Emka Cargo LSP 10W40		8	FROST-Stop Plus SF
Supergrade LL-X 10W40			Windscreen antifreeze
Turbo Super LSP 15W40			
Turbo Super SHPD 15W40		9	FROST-Stop MK 48 Extra
Turbo Super SHPD 20W50			FROST-Stop MK 13
GEAR OILS			FROST-Stop MK VG 11 FROST-Stop FOPR extra
		10	FROST-Stop FOFR extra
Multigear BFL Special ★Transmatic ATF A 295	₩.	10	LUBRICATION GREASE
			Lagerstar EP-2
Universal ATF 3000 Universal ATF 4000		1.1	Lagerstar LIC
		11	Lagerstar MOS
Universal I HM. Fluid green			Lagerstar STS
✓ Universal LHM+ Fluid green		10	Lagerstar MFZ L 5%
Syntogear MAN 75W80		12	Lagerstar MEP
Syntogear ZF-HG 75W80			Lagerstar ZEN-VOG
Syntogear TSL 75W90		10	≠Lagerstar HPWR
Syntogear MB 75W90		13	¥Lagerstar H.O.T.
Syntogear SL 75W90			
Syntogear FDL 75W90		4	RELEASE AGENT
Syntogear FDS 75W140		14	Emkotrenn Extra
Multigear EPX 80W90			Emkotrenn MP 5433
Multigear MDL 80W90			Emkotrenn BTM-NW
Hypoid SAE 85W90		15	Emkotrenn BTM
Multigear MDL 80W90 LS			Emkotrenn EST 45
Multigear SVG 85W140			Emkotrenn MP 5485
Indus CLP-Range		16	ADHESIVE OILS/SAW CHAIN OILS
SYNTHETIC GEAR OILS			Emkotac Saw
Indus PG-Range		17	Emkotac Green Forest 220
Syntolube CLP Range			Emkotac Green Forest
			Emkotac Green Forest Emkotac MEG Range
GEAR OILS/HYDRAULIC OILS		10	Lifikotac MEO Nafige
Unifluid UTTO		18	TOOL AND EQUIPMENT PETROL/TWO-STROKE O
Unifluid Plus Special			Superpower Scooter 1:50
Unifluid TO-4 SAE 10			Superpower Scooter 1:100
Unifluid TO-4 SAE 30		19	Special fuel 2T
Unifluid TO-4 SAE 50			Special fuel 4T
Unifluid TO-4 SAE 60			
Unifluid ZF 20W40		20	CLEANING AGENT
Unifluid PF-Z SAE 75W85	X		Emkoclean S186
ENGINE/GEAR/HYDRAULIC OI	LS		Emkoclean HP 2000
Unitrac STOU 10W30		21	COMPRESSOR OILS
Supertrac MGH 10W40		22	Emkoroc PG
Supertrac MGH Special 10W40			Emkoroc MB 68, 100
Supertrac Morr Special 101/140			Emkolube VDL Range
HYDRAULIC OILS			Emkolube SC Range
Hydrostar HVI 1032		23	Syntolube SC Range
Hydrostar HVI 2268	+		
Hydrostar HVI 32100			ADDITIVES
Hydrostar BFL HV-AR 2268	0	24	AdBlue®
High-performance hydraulic oil			
Hydrostar HVLP Range		25	
Hydrostar HI P-D Range			





Emka Cargo IV-LS 0W20



HC synthetic diesel engine oil for the latest Iveco engines

Specially developed for the Stralis Euro 6 Cursor engines, which have been equipped with a fuel economy package (FEP1). It features a Low SAPS formulation and therefore provides extremely high fuel economy.

Can be used with:

IVECO 18-1804 CLASSE TLV LS

		PU		PU	
Art. no. 0228030	20 liters	1	Art. no. 0228010	205 liters 1	
Art. no. 0228020	60 liters	1	Art. no. 0228001	1000 L IBC 1	

Emka Cargo Extra 5W20



Synthetic low SAPS engine oils which have been specially formulated for Euro 6 D engines produced by MAN and Scania

Emka Cargo Extra 5W20 is a latest generation low SAPS extended-life engine oil with very low viscosity, which has been specially developed for MAN and Scania Euro 6 D diesel engines in HGVs and buses. It is characterised by its exceptional fuel economy and excellent thermal stability.

Only fill into the engines specified below! This engine oil is not considered to be backward compatible with older specifications, never mix!

The operating regulations of the engine manufacturer must always be observed.

Can be used with:

MAN M 3977; Scania LDF-5; Iveco Euro 6 D-engines

		PU	
Art. no. 0211050	5 liters	4	
Art. no. 0211030	20 liters	1	
Art. no. 0211020	60 liters	1	

		PU
Art. no. 0211010	205 liters	1
Art. no. 0211000	Tank	1



Supergrade BFL Extra 5W30





Multifunctional low SAPS lubricant which has been specially developed for the EMKA fluid concept

Supergrade BFL Extra 5W30 is a multifunctional lubricant which has been developed for machinery in the construction industry, agricultural and forestry industries and also ensures fuel economy. It is utilised in engines, hydraulic systems, manual gearboxes and powershift transmissions, thereby contributing to grade rationalisation.

Supergrade BFL Extra 5W30 can be used for 3 functions:

Engine:

It can be utilised in commercial vehicle diesel engines (with/without particulate filters) with the latest reduction technology for engines and emissions which fulfil LEVEL 4 Final, Stage 4i, Stage IV, Stage IIIB emission standards, as well as older generation Stage IIIA, Stage II, Stage I, Stage 1, 2, 3 models. This oil is also imperatively recommended when utilising low sulphur fuels and engines which are equipped with diesel particulate filters.

Manual gearboxes and powershift transmissions:

Supergrade BFL Extra 5W30 can be utilised in all generations of manual gearboxes and transmissions as well as powershift transmissions.

Hydraulic systems:

Supergrade BFL Extra 5W30 can be utilised in all hydraulic systems, irrespective of whether high pressure or low pressure, also when the system circuit incorporates high efficiency filters in the supply pipes/or return circuit.

Supergrade BFL Extra 5W30 can be implemented in all seasons due to its high viscosity index and low continuous flow point of -39 °C. It provides a wide range of applications, with excellent cold start characteristics and the best possible minimisation of wear and oxidation.

Can be used with:

Engine:

ACEA E11, E9, E8, E7, E6, E4; API CK-4, CJ-4, CI-4+, CI-4, CH-4, SN CAT ECF-3/ECF-2/ECF-1a; CUMMINS 20081/78/77/76; Global DHD-1; DAF Extended Drain; Deutz DQC IV-18 LA/IV-10 LA; JASO DH-2/DH-1; KOMATSU E0-DH2; MTU Type 3.1; Detroit Diesel 93K222/93K218; FORD WSS-M2C213-A1; MAN 3677/3477/M3271-1/M3277; MACK E0S-4.5/E0-0 PREMIUM PLUS; Iveco 18-1804 CLASSE TLS E6; Daimler Truck DTFR 15C110 (MB 228.51)/DTFR 15C100 (MB 228.31); Daimler Truck DTFR 15B120 (MB 228.5)/DTFR 15B110 (MB 228.3); VOLVO VDS-4.5/VDS-4; RENAULT TRUCKS RLD-4/RLD-3; Scania LDF-4

Transmission

API GL-4/SAE 30; ALLISON C-4; CATR TO-4 (SAE 10W/30); KOMATSU CLUTCH: TO-10,30; ZF TE-ML 07D

Hydraulic systems:

ISO VG 46 (after 100 Bh) / HV

Applicable like the following products:

CAT HYDRO ADVANCED 10/30; CNH MAT 3509 – CASE MS 1230; JCMA HK 46W(Extended Drain); KOMATSU HO-46 (HV)

		PU
Art. no. 0249330	20 liters	1
Art. no. 0249320	60 liters	1
Art. no. 0249310	205 liters	1
Art. no. 0249300	Tank	1



Emka Cargo E6 5W30



HC synthesis ultra high performance diesel engine oil

for diesel engines and gas engines with/without turbocharging of emission class EURO IV to VI in HGVs, buses and work machines with/without diesel particulate filter (DPF) and/or exhaust gas catalyst (SCR). It is particularly suitable in difficult operating conditions and weather conditions and is also fuel-efficient in combination with low-sulphur diesel fuel. Emka Cargo E6 5W30 provides excellent wear protection and can be utilised according to the manufacturer's specification for oil change intervals up to 100,000 km.

Can be used with:

ACEA E6, E7, E8, E9, E11; API CK-4, SN; DAF Extended Drain; Daimler Truck DTFR 15C110 (MB 228.51)/ DTFR 15C100 (MB 228.31); Detroit Diesel 93K222/93K218; FORD WSS-M2C213-A1; Mack EOS-4.5/EO-0 Premium Plus/EO-N Premium Plus; MAN M3677/M3477/M3277/M3271-1; Iveco 18-1804 TLS E6; Renault VI RXD/RGD/RLD-4/-3/-2; Scania LDF-4; Volvo VDS-4.5/VDS-4; CAT ECF-3; Cummins CES 20086/81; Deutz DQC IV-18 LA/ IV-10 LA; JASO DH-2; MTU DDC Typ 3.1; Voith Retarder Class B

		PU		PU
Art. no. 0227050	5 liters	4	Art. no. 0227010 2	05 liters 1
Art. no. 0227030	20 liters	1	Art. no. 0227000	Tank 1
Art. no. 0227020	60 liters	1		

Emka Cargo Plus 5W30



Synthetic low SAPS engine oil according to API FA-4

Emka Cargo Plus 5W30 is a low SAPS extended life engine oil of the latest generation with lowered viscosity, which has been developed especially for Volvo engines and Mercedes Benz Euro 6 diesel engines in HGVs, buses and work machines, although it can also be utilised for other manufacturer engines which require an engine oil according to API FA-4. It is characterised by its higher fuel economy, increased oxidation stability and shear stability as well as an improved wear protection.

Only fill it in when an engine oil according to API FA-4 has been specified! This engine oil is not considered to be backward compatible with older specifications! The operating regulations of the engine manufacturer must always be observed.

Can be used with:

API FA-4/SN; Cummins CES 20087; Detroit Diesel DDC 93K223; DTFR 15C130 (MB 228.61); Ford M2C214-B1; Mack EO-S 5 Renault RLD-5; Volvo VDS-5

		PU
Art. no. 0210050	5 liters	4
Art. no. 0210030	20 liters	1
Art. no. 0210020	60 liters	1

		PU
Art. no. 0210010	205 liters	1
Art. no. 0210000	Tank	1



Supergrade BFL Extra 10W30





Multifunctional low SAPS lubricant which has been specially developed for the EMKA fluid concept

Supergrade BFL Extra 10W30 is a multifunctional lubricant which has been developed for machinery in the construction industry, agricultural and forestry industries and also ensures fuel economy. It is utilised in engines, hydraulic systems, manual gearboxes and powershift transmissions, thereby contributing to grade rationalisation.

Supergrade BFL Extra 10W30 can be used for 3 functions:

Engine: Supergrade BFL Extra 10W30 can be utilised in commercial vehicle diesel engines (with/without particulate filters) with the latest reduction technology for engines and emissions which fulfil the LEVEL 4 Final, Stage 4i, Stage IV, Stage IIIB emission standards, as well as older generation Stage IIIA, Stage II, Stage I, Stage 1, 2, 3 models. This oil is also imperatively recommended when utilising low sulphur fuels.

Manual gearboxes and powershift transmissions: Supergrade BFL Extra 10W30 can be utilised in all generations of manual gearboxes, as well as in powershift transmissions and PTOs.

Hydraulic systems: Supergrade BFL Extra 10W30 can be utilised in all hydraulic systems, irrespective of whether high pressure or low pressure, also when the system circuit incorporates high efficiency filters in the supply pipes/or return circuit

Supergrade BFL Extra 10W30 can be implemented in all seasons due to its high viscosity index and low continuous flow point of -39°C. It provides a wide range of applications, with excellent cold start characteristics and the best possible minimisation of wear and oxidation.

Can be used with:

Engine:

ACEA E11, E8, E9, E7, E5; API CK-4, CJ-4, CI-4+, CI-4, CH-4, SN; CAT ECF-3/ECF-2/ECF-1a; DAF PSQL 2.1E LD/2.1E/Extended Drain; CUMMINS 20086/81/78/77/76; Detroit Diesel 93K222; Deutz DQC IV-18 LA/IV-10 LA; Global DHD-1; JASO DH-2/DH-1; KOMATSU E0-DH2; Iveco 18-1804 TLS E9; DTFR 15B120(MB 228.5)/DTFR 15B110(MB 228.3); Daimler Truck DTFR 15C120(MB 228.52)/DTFR 15C110(MB 228.51)/DTFR 15C100(MB 228.31); Liebherr LH-00-ENG3A LA/LH-00-ENG LA; MTU Type 3.1/Type 2.1; MAN M 3677/M 3477/M 3775/M 3275-1/M 3575; MACK E0-S 4.5/E0-0 PREMIUM PLUS; Scania LA; Ford WSS-M2C 171-F1; RENAULT TRUCKS RLD-4/RLD-3/RGD; VOLVO VDS-4.5/VDS-4/VDS-3/CNG

Transmission:

API GL-4/SAE 30; ALLISON C-4; CAT TO-4 (SAE 10W/30) KOMATSU CLUTCH: TO-10,30; ZF TE-ML 07D

Hydraulic systems:

ISO VG 46 (-> 100 Bh) / HV

Applicable like the following products:

CAT HYDRO ADVANCED 10/30; CNH MAT 3509 – CASE MS 1230; JCMA HK 46W (Extended Drain); KOMATSU HO-46 (HV)

		PU
Art. no. 0249030	20 liters	1
Art. no. 0249020	60 liters	1
Art. no. 0249010	205 liters	1
Art. no. 0249000	Tank	1



Emka Cargo LSP 10W40



Premium low-friction diesel engine oil

for commercial vehicles with exhaust gas aftertreatment

Emka Cargo LSP 10W40 is an extended-life, low-viscosity engine oil for diesel engines and gas engines with/without turbocharging and exhaust gas aftertreatment systems of emission class Euro I to VI in HGVs, buses and work machines. It has been equipped with state-of-the-art additives in order to comply with the special requirements of exhaust gas aftertreatment and recirculation systems for low SAPS technology. Its low contents of sulphur, phosphorus and ash enable it to easily comply with exhaust emission guidelines.

Can be used with:

ACEA E11, E8, E9, E6, E7; API CK-4, CJ-4, SN; DAF HP-2; Daimler Truck DTFR 15C110 (MB 228.51)/DTFR 15C100 (MB 228.31); Iveco 18-1804 TLS E9; MACK E0S-4.5/E0-N/E0-0 Premium Plus; MAN 3477/3575/3275/3271-1; Renault VI RLD-3/RXD/RGD; Scania Low Ash; Volvo VDS-4.5; JASO DH-2; CAT ECF-3; MTU DDC Typ 3.1; Cummins CES 20086/81/78/77/76; Deutz DQC IV-18 LA/IV-10 LA (TTCD); Voith Retarder "B"

		PU			PU
Art. no. 0224050	5 liters	1	Art. no. 0224010	205 liters	1
Art. no. 0224030	20 liters	4	Art. no. 0224000	Tank	1
Art. no. 0224020	60 liters	1			

Supergrade LL-X 10W40



Super high performance HC synthetic low-friction engine oil

For petrol and diesel engines. It is designed for use in mixed fleets where petrol and diesel engines in cars, trucks and work machinery are operated with and without turbocharging. It always ensures a stable lubricating film due to the very high thermal load capacity. Extended oil change intervals according to the manufacturer's specifications are therefore made possible without any problems.

Can be used with:

ACEA A3/B4, E7; API CI-4, SL; Detroit Diesel DDC 93K215; Daimler Truck DTFR 15B110 (MB 228.3)/ MB 229.1; MACK E0-N/E0-M PLUS; MAN 3275-1; Renault RLD-2; Volvo VDS-3; Global DHD-1; JASO DH-1; Allison C-4; CAT ECF-2; Cummins CES 20076/77/78; Deutz DQC III-10; MTU Type 2

		PU
Art. no. 0245075	1 liter	12
Art. no. 0245050	5 liters	4
Art. no. 0245030	20 liters	1

		PU
Art. no. 0245020	60 liters	1
Art. no. 0245010	205 liters	1
Art. no. 0245000	Tank	1

Turbo Super LSP 15W40



Low SAPS and low-friction diesel engine oil

Specially developed "Low SAPS" engine oil for applications in commercial vehicle Euro VI and Euro V diesel engines with and without exhaust gas aftertreatment and turbocharging when used under difficult operating conditions, also with extended servicing and maintenance intervals. It is a fuel-efficient engine oil based on high-quality base oils and the latest, most modern additive technology with exceptional protection against wear.

Can be used with:

ACEA E9, E7, E6; API CK-4, CJ-4, CI-4+, SN; JASO DH-2; Global DHD-1; Daimler Truck DTFR 15C110 (MB 228.51)/DTFR 15C100 (MB 228.31); MAN 3775/3575/3277; Renault VI RLD-4; Ford WSS-M2C171-F1; MACK E0-S 4.5; Volvo VDS-4.5; SDFG OM 1901-A; Detroit Diesel DDC 93K222/93K218; CAT ECF-3/ECF-2; Cummins CES 20086; Deutz DQC III-10 LA; MTU Typ 2.1

		PU		PU
Art. no. 0323030	20 liters	1	Art. no. 0323010 205 liters	1
Art. no. 0323020	60 liters	1	Art. no. 0323000 Tank	1



Turbo Super SHPD 15W40



Super high performance diesel engine oil

For applications in mixed fleets even under difficult operating conditions. Exceeds the performance requirements of modern petrol engines and Euro V diesel engines with and without turbocharging. It possesses excellent cold-start properties and reduces wear as well as fuel consumption. Turbo Super SHPD 15W40 enables extended oil change intervals corresponding to the manufacturer's specification.

Can be used with:

ACEA A3/B4, E7; API CI-4, SM; DAF; Daimler Truck DTFR 15B110[MB 228.3]/MB 229.1; Detroit Diesel DDC 93K215; MAN M3271-1; MACK E0-N; Iveco 18-1804; Renault VI RLD-2; Volvo VDS-3; Allison C-4/TES 439; Global DHD-1; Jaso DH-1; CAT ECF-2; Cummins CES 20078/77/76; Deutz DQC III-10; John Deere JDQ 78A; MTU Typ 2

		PU
Art. no. 9621045	1 liter	12
Art. no. 9621046	5 liters	4
Art. no. 9621047	20 liters	1

		PU
Art. no. 9621048	60 liters	1
Art. no. 9621049	205 liters	1

Turbo Super SHPD 20W50



Super high performance diesel engine oil (SHPD)

For applications in mixed fleets, even under difficult operating conditions in HGVs and work machines. Exceeds the performance requirements of modern petrol and Euro V diesel engines with and without turbocharging.

It possesses excellent cold-start properties, reduces wear and guarantees a stable lubricating film even at high temperatures.

Can be used with:

ACEA A3/B4, E7; API CI-4, SM; DAF; Daimler Truck (MB 228.3)/MB 229.1; Detroit Diesel DDC 93K215; MAN M3271-1; MACK E0-N; Iveco 18-1804; Renault VI RLD-2; Volvo VDS-3; Allison C-4/TES 439; Global DHD-1; Jaso DH-1; CAT ECF-2; Cummins CES 20078/77/76; Deutz DQC III-10; John Deere JDQ 78A; MTU Typ 2

		PU
Art. no. 9621055	1 liter	12
Art. no. 9621056	5 liters	4
Art. no. 9621057	20 liters	1

		PU
Art. no. 9621058	60 liters	1
Art. no. 9621059	205 liters	1



Multigear BFL Spezial





High performance multifunctional oil, specially developed for the EMKA fluid concept

Designed for the lubrication of hypoid gearboxes or transmissions which are located in front axles and rear axles, highly loaded final drive units as well as axles equipped with limited slip differential. It guarantees optimal cooling as well as vibration-free and jerk-free operation of the oil-immersed brake. Multigear BFL Extra can be implemented for wet brakes and "limited slip" axles from the major manufacturers. It can also be used in all generations of synchronised or mechanical manual gearboxes.

Can be used with:

API GL-5 LS / GL-4; CAT FD-1 (SAE 50); CAT TO-4 (SAE 50) (passed wet braking tests); KOMATSU Micro Clutch (passed wet braking tests)

		PU		PU
Art. no. 1240030	20 liters	1	Art. no. 1240010 205 liters	1
Art. no. 1240020	60 liters	1	Art. no. 1240000 Tank	1

Transmatic ATF A 295



Synthetic automatic transmission oil

Transmatic ATF A 295 is a fully synthetic automatic transmission oil which has been designed for utilisation in heavy duty automatic transmissions in HGVs, buses and work machines which are operating under the most severe or harsh conditions.

The very low flow point (-48 °C) and very high viscosity always guarantee the function of the transmission even at very low temperatures. This enables the longest oil change intervals to be applied although the manufacturer's specifications must always be still observed.

Can be used with:

Allison TES-295/TES-389/TES-468; Daimler Truck DTFR 13C180 (MB 236.91)GM Dexron III G; MAN 339 TypeV2/Z3; VOITH H 55.6336.xx / US B 013/118; ZF TE-ML 14C/16S/20C/25C

		PU		PU
Art. no. 1431050	5 liters	4	Art. no. 1431020 60 liters	1
Art. no. 1431030	20 liters	1	Art. no. 1431010 205 liters	1

Universal ATF 3000



Super high performance automatic transmission fluid

A rationalisation alternative for automatic transmission fluids according to the Dexron IID and Suffix A specification. It can be utilised in automatic transmissions, power steering, powershift clutches and for hydraulic applications in private cars, commercial vehicles and work machinery. The operating regulations of the manufacturers must always be observed.

Can be used with:

GM Dexron II D; ATF Suffix A; Daimler Truck DTFR 13C120 (236.2)/DTFR 13C140 (236.7); Ford Mercon/SQM-2C9010B/M2C138-CJ/M2C166-H/M2C185-A; MAN 339 Typ Z1; MB 236.6; CAT TO-2; Allison C-4; VOITH H 55.6335.XX; Renk-Doromat; ZF TE-ML 03D/04D/05L/11A/14A/17C

		PU
Art. no. 1420675	1 liter	12
Art. no. 1420050	5 liters	4
Art. no. 1420030	20 liters	1

		PU
Art. no. 1420020	60 liters	1
Art. no. 1420010	205 liters	1



Universal ATF 4000



HC synthetic automatic transmission oil

Automatic transmission fluid based on HC-synthesis base oils with excellent integral properties and performance characteristics due to the addition of special friction improving agents. It has been developed for applications in automatic transmissions, gearboxes, power steering, powershift clutches and for hydraulic applications in private cars, commercial vehicles and work machinery.

Can be used with:

Dexron IID/IIE/IIIF/IIIG/IIIH; BMW 83229407807/83229407858; Daimler Truck DTFR 13C100 (MB 236.1)/DTFR 13C120 (MB 236.2); Daimler Truck DTFR 13C140 (MB 236.7)/DTFR 13C170 (MB 236.93/ersetzt MB 236.9); Ford Mercon/M2C-138-CJ/-166H; MAN 339 Typ L1/Z1/V1/Z2/V2; MB 236.5/MB 236.6/MB 236.7/MB 236.10; Volvo 97340/97341/1161521/1161511/1161621; VW G 052162 (TL 52162); Allison C-4/TES-389; CAT TO-2; VOITH 55.6335[G607]/55.6336.3X Extended Drain[G1363]; ZF TE-ML 02F/03D/04D/09A/09B/11A/11B/14A/14B/16L/17C

		PU
Art. no. 1426070	1 liter	12
Art. no. 1426050	5 liters	4
Art. no. 1426030	20 liters	1

		FU
Art. no. 1426020	60 liters	1
Art. no. 1426010	205 liters	1

Universal ZH-Fluid green



Special HC synthetic central hydraulic oil

It can also be used at the very lowest temperatures due to its special formulation. Its optimum performance behaviour and wide temperature range (-60 °C / +100 °C) enables it to be used as a central hydraulic oil in power steering systems, rear axle steering systems, level control systems, shock absorbers, active damping and engine support, hydrostatic drive units for fans, stability systems and traction systems (ABS/ASR/ASC), central locking systems, hydraulic brake boosters, electro-hydraulic convertible roof covering control systems as well as in hydropneumatic suspensions in VW/Audi/Seat/Skoda vehicles (VW Standard TL 521 46).

Can be used with:

DIN 51524-2; ISO 11158 HM; CETOP RP 91 H; Eaton Vickers M-2950-S Mobile, Eaton Vickers I-286-S Industrial; MAN M3289; MB 344.0; VW G 002 000

		PU
Art. no. 1427075	1 liter	12
Art. no. 1427050	5 liters	4
Art. no. 1427030	20 liters	1

	PU
60 liters	1
205 liters	1

Universal LHM+ Fluid green



Special central hydraulic oil

based on synthetic and mineral oil with advanced additives. Suitable for use even at extremely low temperatures. Due to its optimal performance and wide temperature range (-40°C to +130°C), it is used as a central hydraulic oil in power steering systems, rear-axle steering, level control systems, shock absorbers, active engine mounts and damping, hydrostatic drives for fans, stability and traction systems (ABS/ASR/ASC), central locking systems, hydraulic brake boosters, electro-hydraulic convertible top controls, as well as hydropneumatic suspensions in VW, Audi, Seat, Skoda, and other vehicles from leading manufacturers.

Can be used with:

ISO 7308; Land Rover Cold Climate PAS Fluid 14315 LRN2261; MB 343.0; Opel 1940766; PSA B71 2710; Peugeot/Citroen 9979.A1; Saab 93 160 548; Volvo 30741424; VW G 004 000

		PU
Art. no. 1428075	1 liter	12
Art. no. 1428050	5 liters	4
Art. no. 1428030	20 liters	1

		PU
Art. no. 1428020	60 liters	1
Art. no. 1428010	205 liters	1



Syntogear MAN 75W80



Synthetic high performance manual gearbox oil

Syntogear MAN 75W80 has been developed for utilisation in heavily loaded manual gearboxes and automatic transmissions under the most difficult conditions, especially ZF commercial vehicle gearboxes or transmissions equipped with an intarder. It can significantly increase the gear shifting comfort, is compatible with carbon synchroniser rings and realises extremely long oil change intervals according to manufacturer's specifications up to 500,000 km.

Can be used with:

API GL-4; DAF | EATON Transmission; Iveco 18-1807 MGS1; MAN 341 Typ Z4/E3/VR; MIL-L-2105 | Renault; Volvo 97307/97305/97318 | Voith Oil class C; ZF TE-ML 01L/02D/02L/07A/08/16K

		PU			PU
Art. no. 1120730	20 liters	1	Art. no. 1120710	205 liters	1
Art. no. 1120720	60 liters	1	Art. no. 1120700	Tank	1

Syntogear ZF-HG 75W80



Fully synthetic manual gearbox oil

This fully synthetic multi-purpose manual gearbox oil has been specially developed for the requirements of ZF manual gearboxes in commercial vehicles (for the Mercedes Benz 235.41) and automatic transmissions (ZF AS Tronic) with and without an intarder. The modern formulation enables calculating for very long oil intervals (corresponding to the manufacturer's specification) and can also therefore be additionally utilised in other manual gearboxes in HGVs, buses and vans, which would normally require an API GL-4 oil.

Can be used with:

API GL-4; Daimler Truck DTFR 13B160 (MB 235.41); Daimler Truck DTFR 13D120 (MB 235.29); Iveco 18-1807 MSG-2; MAN 341 Typ Z-5/VR; Voith Typ C; Volvo 97307; ZF AS Tronic Transmission; ZF TE-ML 01E/02E/16P

		PU			PU
Art. no. 1113050	5 liters	4	Art. no. 1113020	60 liters	1
Art. no. 1113030	20 liters	1	Art. no. 1113010	205 liters	1

Syntogear TSL 75W90



HC synthetic multi-purpose manual gearbox and axle transmission oil

High performance gear oil with the latest additive technology. It can be used according to the manufacturer's specification in the axle transmissions and manual gearboxes of cars, trucks, agricultural and work machinery. Especially for equalising gears with limited slip (LS) and in hypoid transmissions.

Can be used with:

API GL-5 LS / GL-4; MIL-L-2105 D; ZF TE-ML 05C/05D

		PU
Art. no. 1111775	1 liter	12
Art. no. 1111050	5 liters	4
Art. no. 1111030	20 liters	1

		ΡU
Art. no. 1111020	60 liters	1
Art. no. 1111010	205 liters	1
Art. no. 1111000	Tank	1



Syntogear MB 75W90



HC synthetic ultra high performance engine oil

With tried and tested additive technology. Has been specially developed for utilisation in the Actros

vehicle series from Mercedes Benz. The optimum gearbox efficiency creates fuel savings and is also designed for very long oil change intervals.

Can be used with:

API GL-4; Daimler Truck DTFR 13B110 (MB 235.21/replaces 235.11); MAN Type MB; ZF TE-ML 08

		PU			PU
Art. no. 1120630	20 liters	1	Art. no. 1120610	205 liters	1
Art. no. 1120620	60 liters	1	Art. no. 1120600	Tank	1

Syntogear SL 75W90



Synthetic manual gearbox oil for universal use in commercial vehicles

Syntogear SL 75W90 is a synthetic high performance axle transmission and manual gearbox oil with the latest additive technology to ensure trouble-free operation of the transmission components in commercial vehicles. It can be utilised in synchronised and non-synchronised manual gearboxes and in highly loaded distribution gearboxes and PTOs where an oil according to API GL-5 or GL-4 is normally specified.

Can be used with:

API GL-5/GL-4; SAE J 2360; ARVIN MERITOR 0-76-N; BMW OSB; DAF LKW GL-5; Iveco; Daimler Truck DTFR 12B140 (MB 235.9 replaces MB 235.8), Daimler Truck DTFR 13B110 (MB 235.21 replaces MB 235.11); Iveco MIL-PRF-2105E; Mack GO-J; MAN 341 E-3/Z-2/342 M-3; MIL-PRF-2105 E; Renault B0032/3 Annex 3; Scania STO 1:0; Volvo 97312; ZF TE-ML 02B/05B/07A/08/12B/12L/12N/16F/17B/19C/21B

		PU			PU
Art. no. 1120830	20 liters	1	Art. no. 1120810	205 liters	1
Art. no. 1120820	60 liters	1	Art. no. 1120800	Tank	1

Syntogear FDL 75W90



Fully synthetic heavy duty gear oil for commercial vehicles

With state-of-the-art additive technology for utilisation in rear axles (also hypoid), final drives and selected manual gearboxes. The gearbox oil is characterised by its excellent flow capability and stability at high and very low temperatures and has been specially designed for heavy-duty drive components in (mountain) construction vehicles under severe conditions.

Due to its special formulation and excellent properties, it therefore enables the longest oil change intervals (however, the manufacturer's operating instructions must always be observed).

Can be used with:

API GL-4/GL-5/MT-1; SAE J 2360; Daimler Truck DTFR 12B140 [235.9/replaces 235.8]; MAN 342 Type S-1/M3/341 Z2/E3/GA2; MIL PRF-2105E; Volvo 97312; Scania STO 2:0G/2:0A FS/2:0A/1:1G/1:0; ZF TE-ML 02B/05A/12L/12N/16F/17B/19C/21A

		PU			PU
Art. no. 1117030	20 liters	1	Art. no. 1117010	208 liters	1
Art. no. 1117020	60 liters	1			



Syntogear FDS 75W140



Fully synthetic heavy duty gearbox oil for commercial vehicles

With state-of-the-art additive technology for utilisation in rear axles (also hypoid), final drives and selected manual gearboxes. The gearbox oil is characterised by its excellent flow capability and stability at high and very low temperatures and has been specially designed for heavy-duty drive components in (mountain) construction vehicles under severe conditions.

Can be used with:

API GL-4/GL-5; Daimler Truck DTFR 12B140 (MB 235.9/ersetzt MB 235.8); Mack G0-J; MIL PRF-2105E; MAN 3343 Type S/341 E3; Scania ST0 1:0; Volvo 97312; ZF TE-ML 02B/05B/12B/16F

		PU			PU
Art. no. 1115030	20 liters	1	Art. no. 1115010	208 liters	1
Art no 1115020	60 litars	1			

Multigear EPX 80W90



Super high performance gear oil

GL-4/GL-5 for synchronised and non-synchronised manual gearboxes as well as for axle transmissions, transfer gearboxes, intermediate gearboxes and auxiliary transmissions in vehicles and work machinery. Tried and tested in practical environments as a rationalisation alternative to the following gearbox oil types: SAE 80W / SAE 90 / SAE 80W90 / SAE 85W90.

Can be used with:

API GL-4/GL-5/ SAE J2360;

Daimler Truck DTFR 13B100 (MB 235.14/replaces MB 235.1); Daimler Truck DTFR 12B100 (MB 235.0); MAN M 342 Typ M2/M1; MIL-L-2105D; NATO 0-226; Scania STO 1:0; Volvo 1273.10/97310; ZF TE-ML 05A/07A/12E/16C/17B/19B/21A

		PU
Art. no. 1310775	1 liter	12
Art. no. 1310050	5 liters	4
Art. no. 1310030	20 liters	1

		PU
Art. no. 1310020	60 liters	1
Art. no. 1310010	205 liters	1
Art. no. 1310000	Tank	1

Multigear MDL 80W90



HC synthetic high performance gear oil

Ideally suited for use in the entire powertrain of modern vehicles. It can be utilised in non-synchronised manual gearboxes through to the hypoid, toothed axle transmission of the manufacturers MAN, DAF, IVECO and Renault Trucks corresponding to the manufacturer's specification.

Can be used with:

API GL-4/GL-5/ MT-1; Arvin Meritor 076-D; DAF; IVECO; Daimler Truck DTFR 12B100 (MB 235.0); MAN 342 Typ M2; MAN 341 Typ E2/Z2; MIL-PRF-2105E; SAE J2360; Scania STO 1:0; ZF TE-ML 02B/05A/07A/08/12L/12M/16B/16C/17B/17H/19B/19C/21A/21B

			PU			PU
4	Art. no. 1321030	20 liters	1	Art. no. 1321010	205 liters	1
A	Art. no. 1321020	60 liters	1	Art. no. 1321000	Tank	1



Hypoid SAE 85W90



High performance gear oil

For heavily loaded axle transmissions in commercial vehicles and work machinery. Even at very low outside temperatures, it still provides the quickest possible oil penetration, therefore excellent gearbox efficiency and the lowest possible power losses.

Can be used with:

API GL-5; Daimler Truck DTFR 12B100 (MB 235.0); MAN M 342 Typ M1; MIL-L-2105D; Volvo 97310; ZF TE-ML 16C/17B/19B/21A

		PU
Art. no. 1355070	1 liter	12
Art. no. 1355050	5 liters	4
Art. no. 1355030	20 liters	1

		PU
Art. no. 1355020	60 liters	1
Art. no. 1355010	205 liters	1
Art. no. 1355000	Tank	1

Multigear MDL 80W90 LS



High performance "limited slip" gear oil

With exceptional wear protection properties. It has been developed with the latest additive technology and is utilised in accordance with the manufacturer's specifications in the axle transmission in construction machinery and agricultural machinery, commercial vehicles and buses with and without a multi-disk differential.

Can be used with:

API GL-5/LS; ARVIN MERITOR AXLES; Bell; CLAAS; Fendt; Ford M2C-118-A/197-A; GM 1942382/1942387/9121965/93165290; John Deere JDM J11 F; Liebherr; MIL-L-2105 D; Sennebogen; Terex; Volvo 1273,21 (97321); ZF TE-ML 05C/05N/07A/08/12C/16E/21C/21N

		PU
Art. no. 1372070	1 liter	12
Art. no. 1372050	5 liters	4
Art. no. 1372030	20 liters	1

	PU
60 liters	1
205 liters	1
Tank	1
	205 liters

Multigear SVG 85W140



High performance gear oil for heavily loaded gears

Special high pressure gearbox oil based on high-quality solvent refined base oil. It possesses extraordinary wear protection characteristics and excellent shear stability, which therefore guarantee optimum efficiency even with long periods of use. It can be utilised in highly loaded hypoid axle drives, manual gearboxes, intermediate transmissions and auxiliary transmissions of vehicles and working machinery according to filling specifications.

Can be used with:

API GL-5, DAF; Ford M2C-9002A; GM; Mack GO-CS 3000B/GO-G; MAN 342 Typ M1; MIL-L-2105 D; Scania STO 1:0; Volvo 97310; ZF TE-ML 05A/12E/16D/21A

		PU
Art. no. 1365075	1 liter	12
Art. no. 1365050	5 liters	4
Art. no. 1365030	20 liters	1

		PU
Art. no. 1365020	60 liters	1
Art. no. 1365010	205 liters	1
Art. no. 1365000	Tank	1



Indus CLP Range 68, 100, 150, 220, 320, 460, 680



High performance EP industrial gear oil

The oils of the Indus CLP range are high-performance industrial gear oils according to DIN 51517 Part 3 Type CLP with high pressure absorption capacity and very good wear protection in the mixed friction range. Preferred utilisation in mechanically and thermally highly loaded industrial gearboxes or gears with circulation systems. Also utilised in highly loaded industrial gear units such as spur, bevel and worm gears, which are operated at operating temperatures up to 120 °C, or briefly up to 140 °C. ISO VG 32 to VG 680.

Can be used with:

DIN 51517-3: CLP; ISO 6743-6; ISO 12925-1: CKC/CKD; AGMA 9005-F16 (AS), AIST (US Steel) 224; David Brown S1.53.101 E

Indus CLP 68		PU
Art. no. 3141050	5 liters	1
Art. no. 3141030	20 liters	1
Art. no. 3141020	60 liters	1
Art. no. 3141010	205 liters	1
Art. no. 3141000	Tank	1

Indus CLP 150		
Art. no. 3143050	5 liters	1
Art. no. 3143030	20 liters	1
Art. no. 3143020	60 liters	1
Art. no. 3143010	205 liters	1
Art. no. 3143000	Tank	1

Indus CLP 320		PU
Art. no. 3145050	5 liters	1
Art. no. 3145030	20 liters	1
Art. no. 3145020	60 liters	1
Art. no. 3145010	205 liters	1
Art. no. 3145000	Tank	1

Indus CLI	2 480		PU
			10
Art. no. 3	3147050	5 liters	1
Art. no. 3	3147030	20 liters	1
Art. no. 3	3147020	60 liters	1
Art. no. 3	3147010	205 liters	1

Indus CLP 100		PU
Art. no. 3142050	5 liters	1
Art. no. 3142030	20 liters	1
Art. no. 3142020	60 liters	1
Art. no. 3142010	205 liters	1
Art. no. 3142000	Tank	1

Indus CLP 220		PU
Art. no. 3144050	5 liters	1
Art. no. 3144030	20 liters	1
Art. no. 3144020	60 liters	1
Art. no. 3144010	205 liters	1
Art. no. 3144000	Tank	1

indus CLP 460		PU
Art. no. 3146050	5 liters	1
Art. no. 3146030	20 liters	1
Art. no. 3146020	60 liters	1
Art. no. 3146010	205 liters	1
Art. no. 3146000	Tank	1



Indus PG Range 68, 100, 150, 220, 320, 460, 680, 1000



Indus PG 150		PU
Art. no. 3534050	5 liters	1
Art. no. 3534030	20 liters	1
Art. no. 3534010	205 liters	1

Indus PG 460		PU
Art. no. 3532050	5 liters	1
Art. no. 3532030	20 liters	1
Art. no. 3532010	205 liters	1

Fully synthetic industrial gear oil based on polyglycol

The oils of the Indus PG range are classified as fully synthetic high-performance industrial gear oils with high pressure absorption capacity and very good wear protection in the mixed friction range. They are preferably utilised in mechanically and thermally highly loaded industrial gearboxes with recirculating systems such as spur gear, bevel gear and worm gear, which are normally expected to be operated at high temperatures (briefly up to 200 °C is possible!).

Can be used with:

DIN 51517-3: CLP-PG; ISO 6743-6; ISO 12925-1: CKC/CKD/CKE/(CKS)/CKT; AGMA 9005/E02: EP; Alpha Getriebebau; Flender Transmission; SEW

Indus PG 68		PU	Indus PG 100	PU
Art. no. 3525150	5 liters	1	Art. no. 3528150 5 liters	; 1
Art. no. 3525230	20 liters	1	Art. no. 3528130 20 liters	s 1
Art. no. 3525210	205 liters	1	Art. no. 3528110 205 liters	: 1
Indus PG 220 PU Indus PG 320 PU				
Art. no. 3530050	5 liters	1	Art. no. 3531150 5 liters	5 1
Art. no. 3530030	20 liters	1	Art. no. 3531130 20 liters	5 1
Art. no. 3530010	205 liters	1	Art. no. 3531010 205 liters	; 1
Indus PG 680		PU	Indus PG 1000	PU
Art. no. 3533050	5 liters	1	Art. no. 3535350 5 liters	5 1
Art. no. 3533030	20 liters	1	Art. no. 3535330 20 liters	; 1
Art. no. 3533010	205 liters	1	Art. no. 3535310 205 liters	. 1

Syntolube CLP Range 68, 100, 150, 220, 320, 460,680



Fully synthetic industrial gear oil based on poly alpha olefins

The oils of the Syntolube CLP series are classified as demulsifying, fully synthetic industrial gearbox oils with increased oxidation resistance and ageing resistance, very good load carrying capacity and high wear protection. They are utilised in thermally highly loaded bearings, articulated pressure spindles, spur gear and worm gear as well as planetary gears when increased demands are made on high temperature and low temperature operating limits. Even at short-term peak temperatures of up to 150 °C, the oil still exhibits high lubricant film stability and enables trouble-free operation. It is miscible with mineral gearbox oils and esterbased gearbox oils.

Can be used with:

DIN 51517-3: CLP; ISO 6743-6 und ISO 12925-1: CKC/CKD/CKE; AGMA 9005/E02: EP; AIST 224; Flender BA 7300, Table A

ΡU

Syntolube CLP 68			
Art. no. 3162050	5 liters	1	
Art. no. 3162030	20 liters	1	
Art. no. 3162010	205 liters	1	

Syntolube CLP 150 Art. no. 3163150 5 liters			PU
	Art. no. 3163150	5 liters	1
	Art. no. 3163130	20 liters	1
	Art. no. 3163110	205 liters	1

320		PU	Syntolube CLP 460	
50	5 liters	1	Art. no. 3165050 5 lit	ers
30	20 liters	1	Art. no. 3165030 20 lit	ers
10	205 liters	1	Art. no. 3165010 205 lit	ers

Syntolube CLP 100 PU		
Art. no. 3167050	5 liters	1
Art. no. 3167030	20 liters	1
Art. no. 3167010	205 liters	1

Syntolube CLP 220	t. no. 3164050 5 liters 1 t. no. 3164030 20 liters 1	
Art. no. 3164050	5 liters	1
Art. no. 3164030	20 liters	1
Art. no. 3164010	205 liters	1

Syntolube CLP 680		PU
Art. no. 3166050	5 liters	1
Art. no. 3166030	20 liters	1
Art. no. 3166010	205 liters	1



Unifluid UTTO



High performance gear/hydraulic oil

Multifunctional gearbox oil/hydraulic oil for utilisation in working machinery with combined gearbox, transmission/hydraulic oil system with wet brakes and/or wet clutches as well as for axles. It prevents noise development and thereby ensures trouble-free operation for the duration of the oil change interval. Unifluid UTTO can be utilised for gears, transmission/hydraulic systems and manual gearboxes/PTOs according to API GL-4 SAE 80W or as hydraulic oil type HLP/HVLP-D according to ISO VG 68.

Can be used with:

API GL-4; SAE 80W; DIN 51524-3 HVLPD; AGCO Q-1802/182616 (Whitefarm); Allison C-4; CAT TO-2; CNH MS 1210/1206; CNH MAT 3525/3506/CNH 410 B; Deutz-Allis AC Powerfluid 821 XL; Ford M2C134-D/86-B/C; FNHA-2C200.00; John Deere J20C/J21A; Massey Ferguson CMS M1145/1143/1141/1135; Renault 180596; Valtra; SDFG OT 1891 A; Volvo BM WB 101 (97303, BM Valmet and AWB-Achsen); ZF TE-ML 03E/05F/06K/06R/06S/17E/21F

		PU			PU
Art. no. 1530030	20 liters	1	Art. no. 1530010	205 liters	1
Art. no. 1530020	60 liters	1	Art. no. 1530000	Tank	1

Unifluid Plus Spezial





High performance gear/hydraulic oil in viscosity class 75W80

Its extremely low pour point $(-48 \, ^{\circ}\text{C})$ enables it to achieve excellent wet-braking performance even under the harshest operating conditions and temperatures. It provides the highest possible wear protection, reduced friction resulting in lower fuel consumption and, simultaneously, also prevents noise from wet brakes. Unifluid Plus Special can also be utilised in automatic transmissions, hydraulic systems, torque converters and the wet brakes of tractors and work machinery (VOLVO WB-102) where an SAE 75W80 is required.

Can be used with:

API GL-4; AGCO/ALLIS Powerfluid 821 XL; CLAAS RENAULT AGRICULTURE; CASE MAT 3540/3526/3525/3505/ MS 1209/1207/1206; DIN 51524 T3 HVLPD; Ford ESN-M2C134D/FNHA-2-C-201.00; John Deere J20D; Kubota UDT²/UDT; MC CORMICK HTX; Valtra G2-B10/G2-08; Massey Ferguson M 1145/1143; New Holland NH 410C/B; Volvo 97304/WB102/97303/WB101; ZF TE-ML 03E/05F/06D/06K/06N/06R/17E/21F

		PU			PU
Art. no. 1520030	20 liters	1	Art. no. 1520010	205 liters	1
Art. no. 1520020	60 liters	1	Art. no. 1520000	Tank	1

Unifluid TO-4 SAE 10



Super high performance power transmission and hydraulic oil

Designed for utilisation in axle drive units/end drive units, lateral drive units, powershift transmissions, oil bath brakes, multi-disc clutches, (hydraulic) systems and components in work machinery/construction machines and tractors. It provides the highest possible wear protection and optimises the friction behaviour, thereby preventing noise development in wet brakes and clutches. It can additionally be utilised as a hydraulic oil in Caterpillar machines (for CAT HYDO ADVANCED 10).

Can be used with:

Allison C-4; CAT T0-4/T0-4M/T0-2/TDT0; Komatsu KES 07.868.1; ZF TE-ML 03C; Eaton Vickers I-280-S/M-2950-S/ISO VG 32

		PU			PU
Art. no. 1551030	20 liters	1	Art. no. 1551010	205 liters	1
Art. no. 1551020	60 liters	1	Art. no. 1551000	Tank	1



Unifluid TO-4 SAE 30



Super high performance power transmission oil and hydraulic oil

which has been designed for utilisation in axle drive units/end drive units, lateral drive units, powershift transmissions, oil bath brakes, multi-disc clutches, (hydraulic) systems and components in work machinery/construction machines and tractors.

It provides the highest possible wear protection and optimises the friction behaviour, thereby preventing noise development in wet brakes and clutches.

Can be used with:

API GL-4/CF; Allison C-4/TES-489; CAT TO-4/TO-4M/TO-2; Komatsu KES 07.868.1; ZF TE-ML 03C/07F; Eaton Vickers I-280-S/M-2950-S/ISO: 100

		PU			PU
Art. no. 1553030	20 liters	1	Art. no. 1553010	205 liters	1
Art. no. 1553020	60 liters	1	Art. no. 1553000	Tank	1

Unifluid TO-4 SAE 50



Super high performance power transmission oil and hydraulic oil

which has been designed for utilisation in axle drive units/end drive units, lateral drive units, powershift transmissions, oil bath brakes, multi-disc clutches, (hydraulic) systems and components in work machinery/construction machines and tractors.

It provides the highest possible wear protection and optimises the friction behaviour, thereby preventing noise development in wet brakes and clutches.

Can be used with:

API CF / MT-1; Allison C-4; CAT FD-1/T0-4/T0-4M/T0-2; Komatsu KES 07.868.1; ZF TE-ML 03C/07F; Eaton Vickers I-280-S/M-2950-S

		PU			PU
Art. no. 1535030	20 liters	1	Art. no. 1535010	205 liters	1
Art. no. 1535020	60 liters	1	Art. no. 1535000	Tank	1

Unifluid TO-4 SAE 60



Super high performance power transmission oil and hydraulic oil

which has been designed for utilisation in axle drive units/end drive units, lateral drive units, powershift transmissions, oil bath brakes, multi-disc clutches, (hydraulic) systems and components in work machinery/construction machines and tractors.

It provides the highest possible wear protection and optimises the friction behaviour, thereby preventing noise development in wet brakes and clutches.

Can be used with:

API CF / MT-1; Allison C-4; CAT FD-1/TO-4M/TO-4; Komatsu KES 07.868.1; ZF TE-ML 03C/07F

		PU			PU
Art. no. 1536030	20 liters	1	Art. no. 1536010	205 liters	1
Art. no. 1536020	60 liters	1	Art. no. 1536000	Tank	1



Unifluid ZF 20W40



High performance gearbox oil

For ZF axles with self-locking differentials, gearboxes, transmissions (also with wet brakes and clutches), hydraulic systems etc., recommended in work machinery and construction machines which are exposed to very high thermal loads. It provides the highest possible wear protection and, at the same time, excellently reduces noise from wet brakes., The oil must never be mixed with standard limited slip differential oils (LS oils) SAE 90/85W90

Can be used with:

API GL-4; DIN 51524 HVLP; AGCO Powerfluid 821 XL; Allison C-4; CAT TO-2; CASE MS 1210; CNH MAT 3525/3509/3505; Fendt FNHA-2-C-201.00/200.00; Ford ESN-M2C134-D/86-C/B HCE-102/102W; John Deere JDM J20D/J20C; K0MATSU-HANOMAG; Kubota UDT Fluid; MIL-L- 2105; Massey Ferguson CMS M1145/1143/1141/1135; Valtra G2-08; Volvo WB102/WB101; ZF TE-ML 03E/05F/06E/06F/06K/17E/21F

		PU			PU
Art. no. 1540030	20 liters	1	Art. no. 1540010	205 liters	1
Art. no. 1540020	60 liters	1	Art. no. 1540000	Tank	1

Unifluid PF-Z SAE 75W85





Premium high-performance transmission fluid/hydraulic fluid (UTTO), also for CVT transmissions!

Unifluid PF-Z SAE 75W85 is a premium transmission fluid/hydraulic fluid for utilisation in transmissions with wet brakes and/or clutches (also CVT transmissions!), axles (according to API GL-4), converters, automatic transmissions, hydrostatic drive units and hydraulic systems in the most modern agricultural machines/construction machinery and industrial floor trucks under the most severe operating conditions. It ensures excellent deceleration values, precise response behaviour with continuously high performance and also prevents noise development over the duration of the entire oil change interval. In addition, the modern additive technology thereby guarantees the best possible protection for the components involved. Furthermore, it can be utilised in hydraulic systems when an HVLPD in viscosity class ISO VG 46/VG 68 is required.

Can be used with:

API GL-4, GL-5 (low torque); SAE J300: 10W-30; SAE J306: 75W85; DIN 51524-3 HVLPD ISO VG 46/VG68; AGCO Powerfluid 821 XL/Q-1826/Q-189 (Whitefarm); Allison C-4; CASE MS 1230/1210/1209/1207/1206; CASE IH Hy Tran Plus; CAT MTO/T0-2; CLAAS; CNH MAT 3540/3526/3525/3510/3509/3506/3505; Ford M2C134D/-C|86-C/B/A|53A|48C3|41B; Denison UTTO/THF; Fendt FNHA2200.00/201.00/200.00/Vario/FWN 81001; John Deere JDM J20D/J20C/J20B/J20A/J21A/3000; Komatsu KES07.866/HCE-102/102W (Akcela Multi Trans); Kubota UDT2/UDT/UDT HD; Landini; Massey Ferguson M1145/11 43/1141/1135/1129A/1127/1110; Mc Cormick HTX; MIL-L-2105/B (low torque); New Holland 410B WB NWH 410BC/FNHA-2C.201.00; Renault G.A.12/THFI/Hydrograde 1; SDFG OT 1891A/B/SDF UTTO/Special UTTO (UTTO Ambra VT); SAME-Transmission; Valtra G2-08/G2-B10/410A/B/C/XT60; Volvo VCE WB101(97305)/WB102(97307); ZF TE-ML 02A/03E/03F/03L/05F/06B/06D/06E/06F/06H/06K/06M/06N/06P/06R/06S/06T/17E/21A/21F/21G

		PU			PU
Art. no. 1538030	20 liters	1	Art. no. 1538010	205 liters	1
Art. no. 1538020	60 liters	1	Art. no. 1538000	Tank	1



Unitrac STOU 10W30



Multi-functional oil (STOU) based on high-quality mineral base oils and the latest additive technology

For agricultural vehicles and work machinery. Due to its special additives, it therefore ensures excellent deceleration values and prevents noise development throughout the entire oil change interval. Gears, gearboxes and transmission/hydraulic systems in machinery which require HD engine oils according to SAE 10W30/15W30 or gearbox or transmission oils according to SAE 80W90 API GL-4 can alternatively be filled with Unitrac STOU 10W30/15W30.

In the case of field tractors working "in combination", which are utilising the same hydraulic attachments, it is advantageous when all these units are uniformly filled with Unitrac STOU 10W30/15W30. It is also possible to utilise this oil when using biodiesel (in accordance with DIN EN 14214).

Can be used with:

SAE-Classe 10W30/15W30;
ACEA E3, E2;
API CG-4 / GL-4;
DIN 51524-3: HVLP(-D);
Allison C-4;
CAT TO-2;
Ford M2C 134-D/C/B/159-C/B;
John Deere JDM J20C/J27;
Massey Ferguson CMS M1145/1144/1139/1135;
New Holland NH 410B/030C/82009201;
ZF TE-ML 03A/05K/06B/06C/07B/07D;
Sperry Vickers/Eaton M29505/I-280-S;
Sauer Sunstrand/Danfoss: Hydrostatic Trans Fluid

		PU		PU
Art. no. 1515030	20 liters	1	Art. no. 1515010 205 liter	s 1
Art. no. 1515020	60 liters	1	Art. no. 1515000 Tan	k 1



Supertrac MGH 10W40



Multi-functional oil (STOU) for agricultural machines and work machinery

based on the latest HC synthesis technology, for agricultural commercial vehicles and work machinery. Its special additives therefore enable it to ensure excellent deceleration values and thereby prevent noise development throughout the entire oil change interval. Gears, gearboxes and transmission/hydraulic systems in machinery which require HD engine oils according to SAE 10W40 or gearbox or transmission oils according to SAE 85W90 API GL-4 can alternatively be filled with Unitrac MGH 10W40.

In the case of field tractors working "in combination", which are utilising the same hydraulic attachments, it is advantageous when all these units are uniformly filled with Unitrac MGH 10W40. It is also possible to utilise this oil when using biodiesel (in accordance with DIN EN 14214).

Can be used with:

SAE-Classe 10W40, replaces SAE10W, 20W20 ACEA E3; API CG-4/SF / GL-4; DIN 51524-3: HVLPD; Allison C-4; CAT TO-2; CNH MAT 3525/CNH 410 B; Fendt KDM 41.2011; Ford M2C 134-D/C/B/159-C/B/FNH 8200923; John Deere JDM J20D/C/J27; MAN 271; MIL-L-2104 D; Massey Ferguson CMS M1145/1144/1139; Daimler Truck DTFR 15B110 (MB 228.3)/MB 228.1/MB 227.1; New Holland NH 410B/024C; ZF TE-ML 06A/06B/06C/06D/06F/07B

		PU			PU
Art. no. 1510030	20 liters	1	Art. no. 1510010	205 liters	1
Art. no. 1510020	60 liters	1	Art. no. 1510000	Tank	1

Supertrac MGH Special 10W40



Ultra high performance multifunctional oil (STOU) for construction machines, plant and work machinery

Supertrac MGH Special 10W40 is a latest generation, multifunctional oil for agricultural commercial vehicles, work machinery and construction machinery. The combination of state-of-the-art MC base oils and a special additive package therefore enables it to be utilised all year round as an engine oil for (turbo) diesel engines, in hydraulics, gears, gearboxes, transmissions, final drives/locking differentials with/without oil bath brakes and turbo clutches. The selected additive combination guarantees excellent deceleration values and prevents noise development throughout the entire oil change interval. Gears, gearboxes and transmission/hydraulic systems in machinery which require HD engine oils according to SAE 10W40 or gearbox or transmission oils according to SAE 85W90 API GL-4 can alternatively be filled with Supertrac MGH Special 10W40. In the case of field tractors working "in combination", which are utilising the same hydraulic attachments, it is advantageous when all these units are uniformly filled with Supertrac MGH Special 10W40 in order to not impair the performance canabilities

It is also possible to utilise this oil when using biodiesel (in accordance with DIN EN 14214).

Can be used with:

SAE J300: SAE 10W40, replaces SAE10W, 20W20; SAE J306: SAE 80W90; ACEA E7, E3; API CI-4/CG-4/CE/SF / API GL-3/GL-4; DIN 51524-3: HVLP-D; Allison C-4; CASE MS 1230/1210/1209/1207/1206/1204; Cat T0-2; Deutz DQC III-10; CNH MAT 3526/3525/3509/3505; Fendt Vario; FNHA 2C-200.00/201.00; Ford M2C159-B/C/M2C134-D/M2C86-B/M2C48-C3; John Deere JDM J20D/C/J27D; MAN 3275/271; Massey Ferguson CMS M 1145/1144/1143/1139/1135; MIL-L-2104D; New Holland 82009203/2/1/NH526C/420A/410B/330H/330G/030C/024C; Daimler Truck DTFR 15B110 (MB 228.3)/MB 228.1; ZF TE-ML 05K/06A/06B/06C/06F/06L/06R/07B;

AFNOR NFE 48603 HV; Sauer Sundstrand/Danfoss Hydrostat; Sperry Vickers M2950/Eaton I-280-S

		PU			PU
Art. no. 1512030	20 liters	1	Art. no. 1512010	205 liters	1
Art. no. 1512020	60 liters	1	Art. no. 1512000	Tank	1



Hydrostar HVI 1032



Multi-purpose hydraulic oil

Impresses with its performance capability in heavy duty operations in machinery for construction/forestry and agriculture. Its high viscosity index (>230) and its extraordinary cold flow behaviour, caused by the very low pour point, enables the trouble-free utilisation in a very wide temperature range. A higher wear protection and corrosion protection is guaranteed under high loads in all operating statuses. The product must not be utilised in hydraulic systems which contain silver or silver-plated components and operating elements.

Can be used with:

DIN 51524 Part 3 HVLP 10/15/22/32; DIN 51524 Part 2 HLP 10/15/22/32; DIN 13357 T1/T2; ISO 11158 HV/6743-4 HV; AFNOR NF E 48-603 HV; ASTM D6158 HV; Denison HF-2/HF-1/HF-0; Eaton Sperry Vickers I-286-S/M-2950-S; FZG Test A/8.3/90: Load stage 12

			PU				PU
Ar	t. no. 2125030	20 liters	1	Α	rt. no. 2125010	205 liters	1
Ar	t. no. 2125020	60 liters	1	Α	rt. no. 2125000	Tank	1

Hydrostar HVI 2268





Multi-purpose hydraulic oil for hydraulic oil drives outdoors

Its high viscosity index of 185 (VI) and its extraordinary cold flow behaviour, caused by the very low pour point of -52 °C, enables the trouble-free utilisation in a very wide temperature range. Initially from the (cold) start, it provides excellent protection for the hydraulic components, increased fuel efficiency and enhanced machine performance. It also minimises loss of power at high temperatures and always ensures stable performance under demanding conditions such as heavy loads or high pressure in extreme outdoor conditions. Consistent performance capability not only improves the system performance but also the attachment performance. Hydrostar HVI 2268 can also be utilised in industrial applications where high load capacity and durability are required.

Can be used with:

DIN 51524 Part 3 HVLP 22/32/46/68; DIN 51524 Part 2 HLP 22/32/46/68; DIN 13357 T1/T2; ISO 11158 HV/6743-4 HV; AFNOR NF E 48-603 HV; ASTM D6158; CETOP RP 91H-HV; Denison HF-2/HF-1/HF-0; Eaton Sperry Vickers I-286-S/M-2950-S; General Engines LH-04-1; US Steel 127/136; FZG Test A/8.3/90: Load stage 12; CAT TO-4 SAE 10 Hydraulic application

		PU		PU
Art. no. 2127030	20 liters	1	Art. no. 2127010 205 liters	1
Art. no. 2127020	60 liters	1	Art. no. 2127000 Tank	1

Hydrostar HVI 32100



Multi-purpose hydraulic oil

Impresses with its performance capability in heavy duty operations in machinery for construction/forestry and agriculture. Its high, natural viscosity index and its extraordinary cold flow behaviour, caused by the very low pour point, enables the trouble-free utilisation in a very wide temperature range. A higher wear protection and corrosion protection is guaranteed under high loads in all operating statuses. Hydrostar HVI 32100 can be cleaned in the process through fine filtration without the active integral ingredients being lost.

Can be used with:

DIN 51524 Part 3 HVLP 32/46/68/100; DIN 51524 Part 2 HLP 32/46/68/100; ASTM D6158 HV; ISO 11158 HV; AFNOR NF E 48-603 HV; AIST 126+127; SAE MS1004; GM LS 2; FZG Test A/8.3/90: Load stage 12

		PU		PU
Art. no. 2128030	20 liters	1	Art. no. 2128010 205 liters	1
Art. no. 2128020	60 liters	1	Art. no. 2128000 Tank	1



Hydrostar BFL HV-AR 2268





Blue highly efficient multi-purpose hydraulic oil (BFL concept)

It has been specially developed for the EMKA BFL concept and impresses with its performance capabilities in the heaviest use in machinery for construction/ forestry/agricultural and is highly efficient. Its high viscosity index of >190 and its extraordinary cold flow behaviour, caused by the very low pour point of -48 °C, enables the trouble-free utilisation in a very wide temperature range. Warm running phases and cold running phases are thereby eliminated and allow fuel reductions and time savings with maximum performance of the hydraulic components and simultaneous increase in efficiency. A high level of wear protection and corrosion protection is guaranteed under extreme or harsh conditions and loads in all operating statuses.

The product must not be utilised in hydraulic systems which contain silver or silver-plated components and operating elements.

Can be used with:

DIN 51524 Part 3 HVLP 22/32/46/68; DIN 51524 Part 2 HLP 22/32/46/68; DIN 13357 T1/T2; ISO 11158 HV/6743-4 HV; AFNOR NF E 48-603 HV | ASTM D6158; CETOP RP 91H-HV; Denison HF-2/HF-1/HF-0; Eaton Sperry Vickers I-286-S/M-2950-S; General Engines LH-04-1; US Steel 127/136; FZG Test A/8.3/90: Load stage 12; CAT T0-4 SAE 10 Hydraulic application

		PU		PU
Art. no. 2123030	20 liters	1	Art. no. 2123010 205 liters	1
Art. no. 2123020	60 liters	1	Art. no. 2123000 Tank	1

High performance hydraulic oil HLP Range 22, 32, 46, 68



EP alloyed hydraulic fluid

The oils in the high performance HLP range are classic HLP hydraulic oils. These EP-alloyed mineral oils possess a high natural viscosity index, good air separation characteristics and water separation properties and provide excellent wear protection and corrosion protection. They are considered to be high quality paraffin-based solvent refined oils with anti-corrosive, anti-foaming and anti-oxidation additives which have been specifically designed for modern hydraulic systems and therefore have a wide range of applications within the entire industry. They can be utilised for all lifting equipment in commercial vehicles, devices and appliances, precision hydraulics in machine tools, hydraulic regulators or controllers and torque converters, as well as for all hydraulic systems where HLP rated pressure fluids are specified. The viscosity specifications of the machine manufacturer must be observed.

Can be used with:

DIN 51524 Part 2 HLP 32/46/68; ISO 6743-4; FZG Test A/8.3/90 10; ATLAS COPCO; Bosch Rexroth RE 90220-01; Bumech (HLP 46/HLP 68); Cincinnati Maschine P-68/P-69/P-70; Denison HF-2/HF-1/HF-0 | FAMUR (HLP 68); FERRIT; MAG; PONAR-SILESIA; ZETOR (Proxima/Proxima Plus/Proxima Power/Fortera/HLP 32/HLP 46)

HLP 32

HLP 22	PU	
Art. no. 2155030	20 liters	1
Art. no. 2155020	60 liters	1
Art. no. 2155010	205 liters	1
Art. no. 2155000	Tank	1

		. •
Art. no. 2156070	1 liter	12
Art. no. 2156030	20 liters	1
Art. no. 2156020	60 liters	1
Art. no. 2156010	205 liters	1
Art. no. 2156602	Tank	1

PU

HLP 46		PU
Art. no. 2157070	1 liter	12
Art. no. 2157050	5 liters	4
Art. no. 2157030	20 liters	1
Art. no. 2157020	60 liters	1
Art. no. 2157010	205 liters	1
Art. no. 2157000	Tank	1

HLP 68	PU	
Art. no. 2158050	5 liters	4
Art. no. 2158030	20 liters	1
Art. no. 2158020	60 liters	1
Art. no. 2158010	205 liters	1
Art. no. 2158000	Tank	1



Hydrostar HVLP Range 32, 46, 68



Hydraulic fluid for hydraulic drives outdoors

The shear-stable oils of the Hydrostar HVLP range are high-quality hydraulic oils, based on paraffinic base oils with a high natural viscosity index and state-of-the-art additive technology. The excellent air separating capacity and water separating capacity, which largely eliminates foam formation, and the excellent wear and corrosion protection are what characterise these oils. Due to its high shear stability, it is preferably utilised in modern hydraulic systems under harsh, severe conditions and also thermal conditions. Due to its low flow point of -39 °C and the high viscosity index of 155 (VI), it indicates excellent cold-start behaviour and enables utilisation in a wide temperature range. The viscosity specifications of the machine manufacturer must always be observed.

Can be used with:

DIN 51524 Part 3 HVLP 22/32/46/68; ISO 11158 HV; ISO 6743-4 HV; ASTM D 6158 HV; AIST 126 + 127; Bosch Rexroth RE 90220; AFNOR NF E 48-603 HV; Denison Hydraulics HF-2/HF-1/HF-0; Fives Cincinnati Machine P-70; Eaton Brochure 694 for 35VQ25A; Eaton Vickers I-286 S; FZG-Test A 8,3/90/12. Stage; GM LS-2; JCMAS PO41 HK; MISTA Sp. z.o.o.-RD130/RD165C/H/RD200H; SAE MS1004

HVLP 32	PU	
Art. no. 2126330	20 liters	1
Art. no. 2126320	60 liters	1
Art. no. 2126310	205 liters	1
Art. no. 2126300	Tank	1

HVLP 46	PU	
Art. no. 2126030	20 liters	1
Art. no. 2126020	60 liters	1
Art. no. 2126010	205 liters	1
Art. no. 2126000	Tank	1

HVLP 68			
Art. no. 2126530	20 liters	1	
Art. no. 2126520	60 liters	1	
Art. no. 2126510	205 liters	1	
Art. no. 2126500	Tank	1	

Hydrostar HLP-D Range 22, 32, 46, 68



Detergent hydraulic fluid

The oils of the Hydrostar HLP-D range are high-quality hydraulic oils, made from solvent-refined base oils with a high natural viscosity index and effective additives. The excellent air separating capacity and water separating capacity, which largely eliminates foam formation, and the excellent wear and corrosion protection are what characterise these oils. Ideally suited for utilisation in modern hydraulic systems throughout the whole industry, for all lifting devices in commercial vehicles, devices and equipment, hydraulic regulators and torque converters, as well as for all hydraulic systems. Particularly suitable for systems which are intended to be operated outdoors and where contamination with condensate water can be calculated for. The viscosity specifications of the machine manufacturer must always be observed.

Can be used with:

DIN 51524 Part 2 Type HLP-D; ISO 11158; ISO 6743-4; Bosch Rexroth RE 90220; Bumech; Denison Hydraulics HF-2/HF-1/HF-0; FAMUR; FERRIT; FZG-Test A 8,3/90/12. Stage; MAG Cincinnati Machine P-69; PONAR-SILESIA

HLP-D 22		
Art. no. 2145050	5 liters	4
Art. no. 2145030	20 liters	1
Art. no. 2145020	60 liters	1
Art. no. 2145010	205 liters	1
Art. no. 2145000	Tank	1

HLP-D 46			
Art. no. 2147050	5 liters	4	
Art. no. 2147030	20 liters	1	
Art. no. 2147020	60 liters	1	
Art. no. 2147010	205 liters	1	
Art. no. 2147000	Tank	1	

HLP-D 32	PU	
Art. no. 2146050	5 liters	4
Art. no. 2146030	20 liters	1
Art. no. 2146020	60 liters	1
Art. no. 2146010	205 liters	1
Art. no. 2146000	Tank	1

HLP-D 68					
Art. no. 2148050	5 liters	4			
Art. no. 2148030	20 liters	1			
Art. no. 2148020	60 liters	1			
Art. no. 2148010	205 liters	1			
Art. no. 2148000	Tank	1			



Hydrostar HES



Environmentally friendly multi-purpose hydraulic oil (HES) based on synthetic esters

Rapidly biodegradable, based on renewable raw materials (> 50%) and distinguished with the European Environmental Label (EEL). Due to its multigrade characteristics (VG 32-VG 68), it is optimally suited for utilisation under the highest requirements in mobile and stationary hydraulic systems in construction, water, agriculture and forestry, where there could be a hazard for the environment due to leakage and where a hydraulic oil according to ISO 15380 (HEES) is recommended. The multi-range characteristics of the oil also enable grade rationalisation. When converting over to Hydrostar HES, the conversion guidelines must be observed in accordance with ISO 15380.

Can be used with:

ISO 15380: HEES; ISO VG 32/VG 46/VG 68; EU Ecolabel (EEL / Euro Margerite); Swedish Standard SS15 54 34

		PU		PU
Art. no. 2220030	20 liters	1	Art. no. 2220010 205 liters	5 1
Art. no. 2220020	60 liters	1	Art. no. 2220000 Tank	1

Hydrostar AOH 46



Environmentally friendly multigrade hydraulic oil based on synthetic polyalphaolefins (PAO)

Hydrostar AOH 46 is a rapidly biodegradable hydraulic oil which is based on synthetic polyalphaolefins. Due to its multigrade characteristics (VG 32- 68), it is optimally suited for utilisation under the highest requirements in mobile and stationary hydraulic systems in construction, water, agriculture and forestry, where there could be a hazard for the environment due to a leakage. The multirange characteristics of the oil also enable grade rationalisation.

When converting over to Hydrostar AOH 46, the conversion guidelines must be observed in accordance with ISO 15380.

Can be used with:

DIN 51524-3 (HVLPD) VG 32/46/68; ISO 6743-4 (HEPR)

		PU			PU
Art. no. 2223030	20 liters	1	Art. no. 2223000	1.000 L IBC	1
Art. no. 2223010	205 liters	1			

Hydrostar HES GSE Range



GSE 32		PU
Art. no. 2225230	20 liters	1
Art. no. 2225220	60 liters	1
Art. no. 2225210	205 liters	1
Art. no. 2225201	1000 L IBC	1

Environmentally friendly hydraulic oil (HEES) based on synthetic esters

Hydrostar HES GSE 46 is a synthetic, rapidly biodegradable hydraulic oil (>70% in 28 days) which is based on saturated esters. It has been optimally designed for utilisation under the highest requirements in mobile and stationary hydraulic systems in construction, water, agriculture and forestry, where there could be a hazard for the environment due to a leakage and a hydraulic oil is recommended in accordance with ISO 15380 (HEES). It can be utilised in a wide range of operating temperatures due to its high viscosity index with excellent flow characteristics. When converting over to Hydrostar HES GSE 46, the conversion guidelines must be observed in accordance with ISO 15380.

Can be used with:

ISO 15380: HEES; ISO 11158 HV; DIN 51524-3 HVLP 22/32/46/68; Bosch Rexroth RE 90221; FZG Test, A/8.3/90, DIN 51354 Load stage 12

GSE 46		PU
Art. no. 2225030	20 liters	1
Art. no. 2225020	60 liters	1
Art. no. 2225010	205 liters	1
Art. no. 2225001	1000 L IBC	1

GSE 22	PU		
Art. no	o. 2225130	20 liters	1
Art. no	o. 2225120	60 liters	1
Art. no	o. 2225110	205 liters	1
Art. no	o. 2225100	1000 L IBC	1

GSE 68					
Art. no. 2225330	20 liters	1			
Art. no. 2225320	60 liters	1			
Art. no. 2225310	205 liters	1			
Art. no. 2225301	1000 L IBC	1			



FROST-Stop HDM -38°C





Long-term coolant additive concentrate

A special coolant premix based on ethylene glycol for Summer operation and Winter operation with frost protection and rust protection effects. The finished mix has been mixed together with de-mineralised water so there is no risk of damage from lime scale deposits. It meets the latest engine construction requirements with its increased corrosion protection for engine and cooling systems. As a phosphate-free ethylene glycol coolant based on low-silicate compounds with nitrite ingredients and molybdenum components, it is utilised as an engine coolant and heat transfer agent in internal combustion engines. Especially in so-called "heavy duty" high performance engines. As a special high performance coolant, it is suitable for engines made of cast iron, aluminium or copper alloys. It is especially recommended for high performance petrol, diesel and natural gas engines in vehicles or in industrial applications, in which high-temperature protection for aluminium is hugely important.

Colour: dark red/purple

Can be used with: ASTM D 6210/4985/4340/3306/1384; AS 2108-2004; BS 6580:2010; GB 29743-2013; NC 956-16; NF R 15-601; R 530:2005; JIS K2234: all versions; KS M 2142; MIL TL 6850-0038; NATO S-759; ÖNORM V 5123; PN-C40007:2000; SAE J1034; SANS 1251:2005; UNE 26-361-88/1; 2G; ATLAS; CNH MAT3624; CAT GCM34; CLAAS; CNH INDUSTRIAL; Iveco Standard 18-1830; CUMMINS 85T8-2/CES 14603/CES 14439; DEUTZ DQC CA-14/CB-14/CC-14; DEUTZ-FAHREICHER ENGINES; FAUN; FENDT; FORD ESD-M97849-A/44-D/57-A1; FUSO; HINO; HITACHI; HUERLIMANN; HYUNDAI; INNIO JENNBACHER TA 1000-0200; IRISBUS; IRIZAR; IVECO; JI CASE JIC-501; JOHN DEERE; KOBELCO; KOMATSU; KYMCO; LAMBORGHINI; Tractors; LIEBHERR; MAN 175D/324 Si-OAT evo/Si-OAT/324 SNF/324 NFIMB/SETRA 325.0/326.0 (Ready Mix)/325.3/326.3 (Ready Mix)/325.5/326.5 (Ready Mix); MTU MTL 5048; MWM; PERKINS; RENAULT; Trucks; SAME; STEYER; TADANO; UD NISSAN DIESEL; VAN HOOL; VOLVO Trucks; YANMAR

		PU		PU
Art. no. 6311330	20 liters	1	Art. no. 6311000 1000 LIBC	1
Art. no. 6311110	200 liters	1		

FROST-Stop MK12++



Lobrid Si-OAT coolant additive concentrate

Frost-Stop MK12++ is classified as a full concentrate radiator protection and heat transfer agent based on ethylene glycol with a silicon additive package for Summer operation and Winter operation which provides maintenance-free protection against frost, overheating and rust formation (long-life coolant protection). It is a modern concentrate with high-quality corrosion additives for the engine and cooling system and meets the current requirements of many OEMs, whereby organic and silicate-based technologies complement each other in an excellent way (Si-OAT coolant).

Can be used with:

AFNOR NF-R 15-601Type I; AS 2108:2004; ASTM D3306/D4656/D4985; AUDI (G 012 A8G M1); BENTLEY BS 6580; BUGATTI; CHINA GB 29743-2013; CUMMINS CES 14603; CUNA NC 956-16; JIS K 2234:2006; Lamborghini; MAN 324 Si-OAT; MB 325.5/325.6; MTU MTL 5048; PORSCHE | SAE J 1034; SANS 1251:2005/SH 0521-1999; SCANIA TB 1451; SEAT (G 012 A8G M1); SKODA (G 012 A8G M1); TOYOTA 002721LLAC; UNE 26361-8; VW TL 774 G (G12 ++ /G 012 A8G M1) ab Bj. 2008

		PU		PU
Art. no. 6318075	1,5 liters	12	Art. no. 6318020 60 liters	1
Art. no. 6318050	5 liters	4	Art. no. 6318010 200 liters	1
Art. no. 6318030	20 liters	1		

FROST-Stop Plus SF



Long life coolant additive concentrate Frost-Stop Plus SF is a nitrite-free, amine-free, phosphate-free and silicate-free fully concentrated OAT engine coolant and heat transfer agent based on ethylene glycol for Summer operation and Winter operation with protection against frost and rust (all year round use).

Can be used with:

AFNOR NF R15-601 Type 1; AS 2108-2004; ASTM D 3306 Type 1/D 4985; ASTON MARTIN; AUDI TL 774-D/F; BENTLEY TL 774-D/F; BS 6580:2010; CHRYSLER MS 9176; CHINA GB 29743-2013; CLAAS; CNH MAT 3624; CUMMINS 85T8-2/90T8-4/CES 14603; CUNA NC 956-16; DAF 74002; DEUTZ DQC-CB-14; FORD ESD-M97B49-A/ESE-M97B49-A/WSS-M97B44-D; FVV STANDARDS Heft R443; GM 1899 M/6277 M; GME QL 130100; HYUNDAI >1982; ISUZU; IVECO >01/2014; JAGUAR >1999; JASO M-325; JENBACHER TA 1000-0201; JIS K 2234:2206; JOHN DEERE JDM H5; KIA >1991; KOMATSU; KSM 2142; LAND ROVER >1998; LEXUS >1994; LEYLAND TRUCKS LTS 22 AF 10; LIEBHERR MD1-36-130; MACK EC1 (A4.05.09.01); MAN 324 SNF (For use with black coolant hoses, not suitable for silicone coolant hoses > blue color) / B&W D 36 5600; MAZDA MEZ MN 121 D; MB 325.3; MINI BMW LC-07; MITSHUBISHI >1982; MTU MTL 5048; NISSAN >1982; ÖNORM V 5123; OPEL GM QL130100; PEUGEOT >1993; PORSCHE TL 774-D/F; RENAULT TYPE D; SAAB >2001; SAE J 1034; SANS 1251:2005; SCANIA TB 1451; SEAT TL 774-D/F; SETRA MB 325.3; SKODA TL 774-D/F; SMART >11/2014; SUBARU >1977; Suzuki >1981; TOYOTA >1978; UNE 26361-88/1; VOLVO VCS; VW TL 774 D (G12)/774 F (G12+)

		PU
Art. no. 6317770	1,5 liters	12
Art. no. 6317350	5 liters	4
Art. no. 6317330	20 liters	1

		FU
Art. no. 6317220	60 liters	1
Art. no. 6317110	200 liters	1
Art. no. 6317100	1000 L IBC	1

ווח



Windscreen antifreeze



Windscreen antifreeze -60°C concentrate

is an alcohol-based windscreen washer additive with antifreeze and cleaning components, which effectively prevents the windscreen washer and headlight washer from freezing. Effortlessly removes dirt on conventional glass types and polycarbonate panes in all weather conditions, always providing a clear view. Paints and rubber are not affected. The concentrate can also be used in summer. Here one part of concentrate to 5 - 10 parts of water is sufficient to achieve a net effect and streak-free cleaning of the windscreen.

Ingredients:

Mixture of alcohols, glycols, surfactants, colouring agents and citrus fragrances; Colour: blue; UN no.: 1987; GGVS / ADR: class 3, packing group: III; WGK (water hazard classification): 1

		PU			PU
Art. no. 6310550	5 liters	4	Art. no. 6320220	60 liters	1
Art. no. 6320333	25 liters	1	Art. no. 6320113	210 liters	1

FROST-Stop MK 48 Extra



Coolant antifreeze concentrate

A full concentrate coolant protection agent based on ethylene glycol, free of nitrites, amines, and phosphates, suitable for summer and winter operation with frost and rust protection (year-round use). Due to the hybrid inhibitor package based on silicates, borates, and organic acid salts, it is suitable for aluminum, lightweight metal, and cast iron engines (follow manufacturer specifications).

Can be used with:

AFNOR NF R15-601; AS 2108-2004; ASTM D 3306/D 4985; BS 6580; SAE J 1034; BMW LC-87/83 19 2 211 191; Ford 1 047 035/5 016 438; Jenbacher TA-Nr. 1000-0200; Liebherr Minimum LH-00-COL3A; MAN 324 NF/Pritarder; MB 325.0/MB 000 989 08 25; MTU MTL 5048; Opel B 040 0240/Vauxhall 19 40 656/GM 90297545; Porsche 924, 928, 944, 968; Saab 6901599; VW-Gruppe G 48 (G11) TL 774 C/Audi G 011 A8C A1/Seat G 011 A8C A1/VW G 011 A8C A1

		PU
Art. no. 6318175	1,5 liters	12
Art. no. 6318150	5 liters	4
Art. no. 6318130	20 liters	1

		PU
Art. no. 6318120	60 liters	1
Art. no. 6318110	208 liters	1
Art. no. 6318100	1000 L IBC	1

FROST-Stop MK13



Long life Si-OAT coolant additive concentrate

Frost-Stop MK13 is a fully concentrated engine coolant and heat transfer agent based on 1,2-ethane oil, which is formulated with a mixture of organic and mineral inhibitors (Lobrid). It provides protection against frost, overheating and long-lasting protection against corrosion (Si-OAT coolant). It is a modern engine coolant and heat transfer agent and meets the current requirements of the VW/AUDI Group and other manufacturers. The product is borate, nitrite, amine and phosphate-free. ATTENTION! When determining the freezing point by utilising a refractometer, then an incorrect value will be indicated by the glycerine content!

Can be used with:

ASTM D 3306; AUDI G13; BENTLEY G13; BS 6580:2010; BUGATTI G13; LAMBOR-GHINI G13; SEAT G13; SKODA G13; VW TL 774 J (G13)

		PU
Art. no. 6319075	1,5 liters	12
Art. no. 6319050	5 liters	4
Art. no. 6319025	20 liters	1

		PU
Art. no. 6319020	60 liters	1
Art. no. 6319010	200 liters	1



FROST-Stop MK VG 11



OAT coolant additive concentrate (VW Group)

Frost-Stop MK VG 11 is a full OAT concentrate radiator protection agent and heat transfer agent which, with a combination of silicate inhibitors and phosphorus inhibitors (SPI), provides the cooling system with maintenance-free protection against frost, overheating and rust formation for Summer and Winter operation. It is a modern concentrate with high-quality corrosion additives for the engine and cooling system and it fulfils the special requirements for the Volkswagen Group's most modern engines. It also provides long-lasting corrosion protection, even when exposed to the highest thermal stresses. Colour: Pink.

Can be used with:

AS 2108:2004; ASTM D3306/1384/4340/4985/6210; AUDI; Bentley; Bugatti; Lamborghini; Porsche; Seat; Skoda; VW TL-774-C(G11)/-D(G12)/-F(G12+)/-G(G12++)/-J(G13)/-L(G12evo); BS 6580:2010; GB 29743-2013; CUNA NC 956-16; NF R15-601; FW R530:2005; JIS K2234:all; KS M2142; BT-PS-606A; DCSEA 615/C; TL 6850-0038; E/L-1415b; FS 6850-0951; FSD 8704; NATO S-759; ÖNORM V5123; PN-C40007: 2000; SAE J1034; SANS 1251: 2005; Empa 170'803; UNE 26-361-88/1; 2G all; Alfa Romeo '76-; Aprilia; Aston Martin; Atlas; Bentley '80-'05; BMWMini LC-87/-97/-18; BYD; CNH MAT3624; CAT GCM34; Chevrolet from '01; Chrysler all; Citroen from '93; CLAAS; CNH Ind. Iveco 18-1830; Cummins 85T8-2/CES14603/14439; Dacia from '05; Daewoo all; DAF MAT74002; Daihatsu from '79; Deutz DQC CA-14/CB-14/CC-14; Deutz Fahr all; Dodge from '11; Ducati; Eicher all; Faun; Fendt all; Ferrari '79-'09, from '10; Fiat '82-'04, from'05; Ford to '97, from'98/ESD-M97B49-A/B44-D/B57-A1; Fuso all; GM GMW3420/B0401065; Gilera; GMC all; Hino all; Hitachi; Honda from 83 (Bike too); Huerlimann from 03./from 04.'17; Hyundai ab'82; Innio/Jennbacher TA 1000-0200; Iribus; Irizar all;Isuzu;Iveco from 01.#14/18-1830; Jaguar '86-'99,from'99/CMR 8229/STJLR 651.5003/E-Vehicles; Jeep; JI Case JIC-501; John Deere all; Kawasaki; Kia from'91; Kobelco; Komatsu; KTM; Kymco; Lada all; Lamborghini Traktors; Lancia '76-`05, from'05; Land Rover from '98/E-Vehicles/STJLR 651.5003; Lexus from '94; Liebherr all; Lotus'80-,99, from'00; Mahle; MAN 175D/324NF/SNF/Si-OAT/Si-OATevo; Mazda from'77; MB/Setra 325.0/.3/.5/.6/326.0(RM)/.3/.6; Mitsubishi(MHI) all; MTU MTL 048; MWM all; Nissan Opel from 82; from 75,00, from 01/B040240/GMEL1301; Perkins; Peugeot from 93/Enginebike; Piaggio; Renault from 95/Trucks all; Rolls Royce from 98; Rover from 82/Saab from 75-,00, from 01/6901599; Same all; Steyer Engines; Smart all/ Subaru from'77; Suzuki from'81/ Enginebike; SYM; Tadano; Tesla all; to'20; TGB; Toyota all Diesel from 15/all Benziner from 78; Triumph; DU Nissan Diesel all; Van Hool; Vauxhall GMEL1301/GMW3420; Volvo TR-31854114-002/all/Trucks all; Yamaha; Yanmar

,		PU
Art. no. 6319175	1,5 liters	12
Art. no. 6319150	5 liters	4
Art. no. 6319130	20 liters	1

		PU
Art. no. 6319120	60 liters	1
Art. no. 6319110	200 liters	1

FROST-Stop FOPR extra



OAT coolant additive concentrate

Frost-Stop FOPR extra is a full OAT concentrate radiator protection agent and heat transfer agent which, with a combination of special inhibitors, provides the cooling system with maintenance-free protection against frost, overheating and rust formation for Summer and Winter operation. It is a modern concentrate with high-quality corrosion additives for the engine and cooling system and thereby provides long-lasting corrosion protection, even when exposed to the highest thermal stresses.

Colour: Pink.

Can be used with:

Ford WWS-M97B44D; GM 6277M (OPEL); Renault Type D

		PU
Art. no. 6319275	1,5 liters	12
Art. no. 6319250	5 liters	4
Art. no. 6319230	20 liters	1

		PU
Art. no. 6319220	60 liters	1
Art. no. 6319210	200 liters	1



Lagerstar EP-2



EP long life grease for rolling and sliding bearings

A high-quality, ageing-resistant and resilient EP lithium soap-type grease for the lubrication of rolling bearings and plain bearings in industry, motor vehicles and in working machinery in construction, forestry and agriculture. It is also suitable for use in BEKA-MAX, Lincoln and Delimon HGV central lubrication systems.

Can be used with:

MAN 283 Li-P2; MB DBL 6804.00 Blatt 267.0; Volvo Std 1277.18

Technical data:

- KP2K-30
- ISO-L-X-CCHB 2
- NLGI Class 2
- Drip point >175 °C
- Operating temperature -30/+120 °C, briefly at +130 °C
- Soap basis: Lithium
- VKA welding force 2400 N

			PU
Art. no. 4240683	Pull-Off	400 g	24
Art. no. 4241484	System Reiner	500 g	30
Art. no. 4241150		5 kg	1
Art. no. 4240330		15 kg	1

		PU
Art. no. 4240220	25 kg	1
Art. no. 4240110	50 kg	1
Art. no. 4240000	180 kg	1

Lagerstar LIC



High temperature EP long life grease

Lithium complex-saponified high-temperature grease for very high mechanical and thermal loads. Ideally suited for the lubrication of rolling bearings and plain bearings on generators, electric motors, fans and ventilators. Lagerstar LIC is also used in wheel hubs and clutch release bearings.

Technical data:

- DIN 51825: KP2N-30
- ISO/DIS 6743-9: ISO-L-XCDHB 2
- Thickener: Lithium complex soap
- Product colour: Blue
- NLGI Class 2

- Operating temperature -30/+150 °C
- Drip point >220°C
- Walk penetration: 275 290
- VKA welding force: 3000 N

			PU
Art. no. 4263880	Pull-Off	400 g	24
Art. no. 4263884	System Reiner	500 g	30
Art. no. 4260150		5 kg	1

		PU
Art. no. 4260130	15 kg	1
Art. no. 4260220	25 kg	1
Art. no. 4260210	50 kg	1

Lagerstar MOS



Long life EP lubricating grease with graphite and MoS² additives

A dark-coloured long life lubricating grease with dry-running properties for plain bearings/rolling bearings and other lubrication points with high mechanical stress factors in work machinery. It reduces the friction, effectively minimises noise and forms a load-bearing lubricating film on metal sliding surfaces through the solid additives, which thereby reduces wear.

Technical data:

- KPF2K-30 (NLGI Class 2)
- Operating temperature -30/+130°C, briefly at 140°C
- Drip point: approx. 185 °C
- Soap basis: Lithium
- VKA welding force: 3200 N
- Base oil viscosity at 40 °C: approx. 155 mm²/s

			PU
Art. no. 4210683	Pull-Off	400 g	24
Art. no. 4210890	System Reiner	500 g	30
Art. no. 4210550		5 kg	1

		PU
Art. no. 4210110	50 kg	1
Art. no. 4210000	180 kg	1



Lagerstar STS



Langzeit EP-Schwerlastfett mit 3% Molybdändisulfid auf Basis synthetischer Grundöle

Ein dunkelfarbiges Langzeit-Schmierfett mit Notlaufeigenschaften für Gleit-/Wälzlager und extrem druck- und stoßbelasteter Lagerungen in Arbeitsmaschinen. Die enthaltenen Feststoffzusätze (3%) lagern sich an den Gleitflächen ab und bilden eine neutrale Schmierschicht in Form von Gitterstrukturen. Dadurch eignet es sich besonders für selten nachgeschmierte Lager und schwer zugängliche Schmierstellen, auch unter erschwerten Betriebsbedingungen.

Technical data:

- KPF2N-30
- ISO-L-XCDEB 2

Art. no. 4110000

- NLGI Class 2
- Drip point: approx. 190 °C
- Operating temperature -30/+140°C, briefly at 150°C
- 30, 1140 O, Briefly at 130 O

•	Soap	basis:	Lithium
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• VKA welding force: 3800/4000 N

 Base oil viscosity at 40 °C: approx. 800 mm²/s

			PU
Art. no. 4110883	Pull-Off	400 g	24

Lagerstar MFZ L 5%



Long life EP lubricating grease with 5% molybdenum disulphide

180 kg

A dark-coloured long life lubricating grease with dry-running properties for plain bearings/rolling bearings and extremely pressure-loaded and shock-loaded bearings in working machinery. The purely mechanically effective solid additives (5%) are deposited on the sliding surfaces and form a neutral lubricating layer in the form of lattice structures. Lagerstar MFZ L 5% therefore indicates distinct friction-reducing properties. Lagerstar MFZ L 5% complies with the Caterpillar specification.

Technical data:

- KPF2K-30
- ISO-L-X-CCHB 2
- NLGI Class 2
- Operating temperature -30/+120 °C, briefly at 130°C
- Drip point approx. 185 °C
- Soap basis: Lithium

			PU			PU
Art. no. 4211083	System Reiner	500 g	20	Art. no. 4211100	180 kg	1
Art. no. 4211120		25 kg	1			

Lagerstar MEP



Highly adhesive wear protection paste

A lubricating paste which has been tempered with metal powder and solids, utilised to lubricate insertion tools and wear bushings of hydraulic hammers and pneumatic hammers. Please note! It is not a lubricating grease and must not be utilised in roller bearings and plain bearings!

Technical data:

- MF2 U-20 (NL GI Class 2)
- Operating temperature -20°/+1100 °C
- Drip point > 250 °C
- Soap basis: Aluminium complex
- Base oil viscosity at 40 °C: approx. 350 mm2/s

			PU
Art. no. 4360883	Pull-Off	400 g	24
Art. no. 4360884	Lube Shuttle	400 g	24
Art. no. 4360783	Lincoln	400 g	20
Art. no. 4360990	System Reiner	500 g	30

		PU
Art. no. 4360050	5 kg	1
Art. no. 4360030	15 kg	1
Art. no. 4360020	25 kg	1



Lagerstar ZEN-VOG



High performance fluid grease for central lubrication systems

Specially developed for central lubrication systems in commercial vehicles. Furthermore, can also be utilised in gearboxes which are subjected to low to medium loads. It has been approved by Daimler-Benz (operating substances regulation 264), Willy Vogel and MAN (according to works standard 283-Li - P00) for use in HGV central lubrication systems.

Technical data:

- GP 00/000 K-50
- NLGI Class 00/000
- Drip point >180°C
- ISO-L-X-DCEB-00/000
- Operating temperature -50/+120 °C
- Soap basis: Lithium

		PU
Art. no. 4320570 Tube	900 g	20
Art. no. 4320450	5 kg	1
Art. no. 4320330	15 kg	1

			PU
Α	rt. no. 4320220	25 kg	1
Α	rt. no. 4320110	45,5 kg	1
Α	rt. no. 4320000	180 kg	1

Lagerstar HPWR



(Salt-)water resistant polymer, special grease

Lagerstar HPWR is a polymer, special long-term grease designed for plain bearings/roller bearings and other lubrication points, which is utilised especially under critical conditions such as (salt) water, high humidity, vibrations, shock loads and vibration loads in vehicles, working machinery and water pumps. Its high base oil viscosity means that it provides a pronounced adhesive power, which enables extended lubrication intervals and ensures a long running time for the machinery concerned.

		PU
Art. no. 4250084	500 g	30
Art. no. 4250035	18 kg	1

Lagerstar H.O.T.



High-temperature grease for roller bearings and plain bearings

Lagerstar H.O.T. is a high-temperature grease based on mineral oil with a calcium sulphate complex thickener of the latest generation with EP and AW additives already integrated. It is utilised in roller bearings and plain bearings where high temperatures and extreme pressure and shock or impact loads are present, such as in the construction industry, e.g. in road pavers, bitumen mixing plants/asphalt mixing plants, work machinery, crushing plants and other vehicles/plants where high temperatures can develop and which are also operated under adverse conditions and environmental influences (offroad and/or offshore).

It can also be utilised in the steel industry on batching cranes, rotary furnaces or electric rollers in hot rolling mills.

		PU
Art. no. 4370683	400 g	24
Art. no. 4370220	25 ka	1

Additional lubricating greases can be found in our LUBRICATING GREASES product catalogue.



Emkotrenn Extra



Special concrete release agent

Emkotrenn Extra is a special release agent for utilisation in the construction industry and concrete industry. It contains special active ingredients for the highest requirements in concrete construction and can be utilised on all currently available formwork or shuttering surfaces. A stable and pressure-resistant release film is built up, which demonstrably prevents build-up even in inaccessible places and ensures easy, fast and, above all, materialfriendly deshuttering work. It can be additionally utilised to protect against concrete caking on construction machinery and vehicles as well as on asphalt pavers and loading areas of HGVs which are transporting asphalt. Emkotrenn Extra is not aggressive to paints, plastics and metals and the product does not resinify. 1 litre of release agent is sufficient for approx. 60-70m³ depending on the type of application and formwork or shuttering involved.

Technical data:

- Colour: L2.5, DIN ISO 2049
- Odour: mild, typical for the product
- Density at 15°C: 0.870 Kg/m³
- DIN 51 757
- Appearance: gold-yellow to brownish Viscosity at 40 °C: 9.5 mm²/s, DIN51 562- 1
 - Flash point:> 130 °C, DIN EN ISO 2719
 - Pour point: <-30 °C, DIN ISO 3016
 - GIS Code BTM 20

		PU		PU
Art. no. 6115033	20 liters	1	Art. no. 6115010 205 liters	1
Art. no. 6115020	60 liters	1	Art. no. 6115000 Tank	1

Emkotrenn MP 5433



Mixer protection

Special concrete release agent which prevents concrete and mortar from adhering to metal and painted surfaces on machines/vehicles which are involved in concrete production, processing and transport. Due to its special active ingredients, it builds up a stable protective film in a short time, which therefore also serves as corrosion protection and thereby also provides lasting protection for inaccessible areas. It is gentle on the material it is applied to and ensures quick and easy cleaning. Ideally, it should be applied to the still wet surface after cleaning by spraying at 4-6 bar using a flat spray nozzle. The product can also be utilised as a shuttering oil.

Technical data:

- Appearance: gold-yellow
- Density at 15 °C: 0.880 g/cm³
- Viscosity at 40 °C: 9 mm²/s
- Pour point: -25°C
- Flash point: >100 °C
- Solubility: not water-miscible

		PU			PU
Art. no. 6127033	20 liters	1	Art. no. 6127000	Tank	1
Art. no. 6127010	205 liters	1			

Emkotrenn BTM-NW



Bitumen release agent - not water-miscible

Based on paraffin hydrocarbons. It is used in the asphalt industry to prevent caking on the mixing material. It should be applied undiluted.

Technical data:

Properties	Test method	Typical values	Unit
Appearance	Visual	Gold-yellow	-
Colour	DIN ISO 2049	L1.0	-
Odour	Sensory	Mild, typical for the product	-
Density at 15 °C	DIN 51 757	830	kg/m³
Viscosity at 40 °C	DIN 51 562-1	4.0	mm²/s
Flash point	DIN EN ISO 2719	>100 °C	

		PU
Art. no. 6146030	20 liters	1
Art. no. 6146010	205 liters	1



Emkotrenn BTM



Bitumen release agent

Prevents sticking/caking of bitumen and hot or mastic asphalt in mixing plants, road pavers, road (pneumatic) rollers, tools and loading areas of HGVs. The product is based on hydrocarbons with additives and emulsifiers and also forms a stable emulsion even with hard water.

Mixing: Emkotrenn BTM is to be added to one part water while stirring.

> not vice versa!!

Then stir in the rest of the water. Mixing ratio: 1:10 to 1:20.

Technical data:

- Appearance: brownish
- Density at 15 °C: 0.900 g/cm³
- Viscosity at 40 °C: 30 mm²/s
- Pour point: -15°C
- Flash point: >100 °C
- Solubility: water-miscible

		PU
Art. no. 6145033	20 liters	1
Art. no. 6145020	60 liters	1
Art. no. 6145010	205 liters	1
Art. no. 6145000	Tank	1

Emkotrenn EST 45



Biodegradable concrete release agent

Emkotrenn EST 45 is a biodegradable special release agent for the concrete industry and can be utilised for all common formwork and shuttering or as mixer protection. It ensures easy and quick release of the formwork or shuttering and is not aggressive to polyurethane or two-component acrylic varnishes. However, it will attack polystyrene! It builds up a stable and pressure-resistant release film and also prevents build-up in inaccessible places. The product is to be applied undiluted by spraying with a flat-jet nozzle evenly and sparingly (avoid puddles and remove any immediately). 1 litre is sufficient for approx. 40-70 m² depending on the type of application and formwork or shuttering involved.

Technical data:

- Appearance: gold-yellow
- Viscosity at 40 °C: 9.5 mm²/s DIN 51 562-1
- Pour point: <-10 °C DIN ISO 3016
- GIS Code: BTM 10

- Density at 15 °C: 900 Kg/m³ DIN 51 757
- Flash point:> 180°C DIN EN ISO 2719
- Biological degradability: 87% OECD 301 B

		PU			PU
Art. no. 6135030	30 liters	1	Art. no. 6135000	1.000 L IBC	1
Art. no. 6135010	205 liters	1			

Emkotrenn MP 5485



Napthene-based concrete release agent

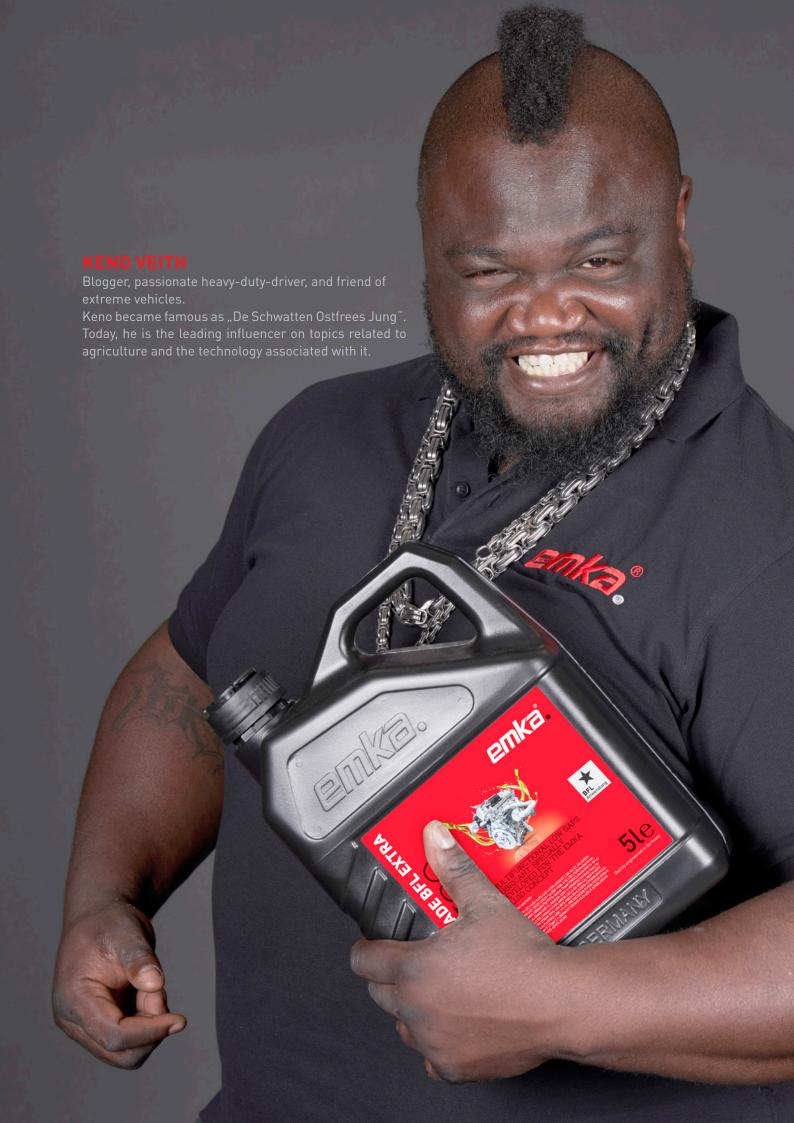
Emkotrenn MP 5485 is a non-water miscible concrete release agent containing special naphthene-based base oils and active ingredients, which creates a protective layer on concrete production machinery, transport machinery and processing machinery and everything which comes into contact with concrete or mortar. It forms a solid protective film in just a few minutes, thereby ensuring easy, quick cleaning and providing lasting protection against corrosion while being gentle on the material.

The product is to be applied undiluted by spraying using a flat-jet nozzle immediately after cleaning (onto the still wet substrate) and evenly.

Technical data:

- Appearance: clear, yellow
- Viscosity at 40 °C: 10.5 mm²/s DIN 51 562-1
- Solubility: not water-miscible
- Density at 15 °C: 880 Kg/m³ DIN 51 757
- Flash point:> 100°C DIN EN ISO 2719
- GIS Code: BTM 20

		PU		PU
Art. no. 6129020	60 liters	1	Art. no. 6129001 1.000 L IBC	1
Art. no. 6129010	205 liters	1		





Emkotac Saw



All year round saw chain oil for all chainsaws

Can be used all year round in Central Europe. It is characterised by distinctly good adhesion and does not splash off the chain uncontrollably even at high temperature loads and/or revolution speeds. The chain oil is coloured brown and thereby provides the benefits that the lubricity is improved by the additional proportion of solid lubricant MoS2, the filling level of plastic tanks can be inspected easily and quickly and the oil quantity metering level control process, in accordance with the saw chain manufacturer's specifications, is made considerably easier. Emkotac SÄG fulfils the saw chain oil regulations of, among others: Dolmar, Clinton, Cobra, Comet, Homelite, Lombard, McCulloch, Mono, Oregon, Pioneer, Poulan, Remington, Root, Skil, Solo, Stihl.

Technical data:

- Density at 15 °C: 0.877 g/cm³
- Viscosity at 40 °C: 95.4 mm²/s

		PU
Art. no. 3450075	1 liter	12
Art. no. 3450550	5 liters	4
Art. no. 3450330	20 liters	1

- Pour point: -25°C
- Viscosity index: approx. 112

		1 0
Art. no. 3450223	60 liters	1
Art. no. 3450010	205 liters	1
Art. no. 3450000	Tank	1

DLI

Emkotac Green Forest 220



Bio saw chain oil for wood harvesters

A biodegradable high-performance saw-chain adhesive oil based on vegetable oils, free from synthetic oil and mineral oil and specially designed for timber harvesting machines (harvesters). A special additive package protects the product from premature ageing and/or resinification, optimises the viscosity position and thereby improves the adhesion characteristics and gliding properties. It can be utilised all year round and possesses excellent characteristics fore adhesion, wear and corrosion protection. Emkotac Green Forest 220 must never be mixed with synthetic oil or mineral oil, otherwise technical faults and malfunctions could occur. It is not water-soluble, so that in the event of leakage, the product remains largely in the upper layers of the earth and is therefore not carried downwards and enters into the groundwater. The proportion of renewable raw materials is approx. 95%, which means that the product bears the "Blue Angel" environmental label. The biodegradability is >98% in 21 days.

		PU		PU
Art. no. 3453030	20 liters	1	Art. no. 3453010 205 liters	1
Art. no. 3453020	60 liters	1	Art. no. 3453000 Tank	1

Emkotac Green Forest



Bio saw chain lubricant for portable chainsaws

Based on vegetable oils and free of synthetic and mineral oil. Special additives protect the product against premature ageing and/or resinification and therefore optimise the viscosity position and improve the adhesion characteristics and gliding properties. This thereby achieves lower wear on the chain and sprocket. The additive also quarantees utilisation under extreme and harsh winter conditions (cold test at 72h/-18 °C, pour point -30 °C). Suitability for use has been confirmed without restriction by the KWF. It is produced on the basis of the renewable raw material of rapeseed oil (cold pressed). This therefore conserves the limited raw material resources (e.g. mineral oil). Rapeseed as a product is considered to be environmentally friendly, as harmful carbon dioxide is extracted from the air during plant growth and vital oxygen is formed. Emkotac Green Forest must not be mixed with synthetic oil or mineral oil. Technical problems may occur due to the mixing! Emkotac Green Forest is not water-soluble, so that in the event of leakage, the product remains largely in the upper layers of the earth and is therefore not carried downwards and enters into the groundwater. It additionally fulfils the criteria for the EU Ecolabel and "Blue Angel" environmental awards. The biodegradability is >98% in 21 days corresponding to the CEC-L-33-A-93 test.

		PU
Art. no. 3461070	1 liter	12
Art. no. 3461050	5 liters	4
Art. no. 3461030	20 liters	1

		PU
Art. no. 3461020	60 liters	1
Art. no. 3461010	205 liters	1
Art. no. 3461000	Tank	1



Emkotac MEG Range 220, 320, 460, 680



Highly adhesive blade oil

Thread-forming and pressure-resistant lubricating oil for the lubrication of vertical guides (e.g. on saw frames) and sliding surfaces. The lubricating oil, which has been formulated on a mineral oil basis and the most modern additive technology, possesses excellent wetting properties and, also due to its stable lubricating film, provides optimum adhesion and lubricating performance with long-lasting protection against wear and ageing.

Technical data:

- Density at 15 °C: 0.891-0.910 g/cm³
- Pour point: -12°C
- Viscosity at 40 °C: 220-680 mm²/s
- Viscosity index: approx. 100

MEG 220		PU
Art. no. 3413030	20 liters	1
Art. no. 3413020	60 liters	1
Art. no. 3413010	205 liters	1
MEG 320		PU
Art. no. 3414030	20 liters	1
Art. no. 3414020	60 liters	1
Art. no. 3414010	205 liters	1
MEO //O		DII
MEG 460		PU
Art. no. 3415030	20 liters	1
Art. no. 3415020	60 liters	1
Art. no. 3415010	205 liters	1
MEG 680		PU
Art. no. 3426030	20 liters	1
Art. no. 3426020	60 liters	1

205 liters

Art. no. 3426010



Superpower Scooter 1:50



Semi-synthetic high-performance two-stroke engine oil

This semi-synthetic two-stroke engine oil, equipped with a modern additive package, is designed for use in air- and water-cooled, mixed and fresh oil-lubricated two-stroke engines under very high loads and speeds. It is active in mixing and forms a homogeneous mixture with unleaded fuels that does not separate even after prolonged standing. Due to its excellent corrosion protection, it can also be used for outboard motors.

Can be used with:

API TC/TC-W 3; JASO FD; Global GD; ISO-L-EGD; 2-Stroke DFI; Husquarna 272

Mixing ratio for every 5 liters of gasoline:

		PU
Art. no. 0460955	100 ml	98
Art. no. 0430075	1 liter	12
Art. no. 0430050	5 liters	1

		PU
Art. no. 0430030	20 liters	1
Art. no. 0430020	60 liters	1
Art. no. 0430010	205 liters	1

Superpower Scooter 1:100



Synthetic high-performance two-stroke engine oil

This high-quality synthetic two-stroke engine oil, equipped with a modern additive package, is designed for use in air- and water-cooled, mixed and fresh oil-lubricated two-stroke engines under maximum load and at high RPMs. It is active in mixing and forms a homogeneous mixture with unleaded fuels that does not separate even after prolonged standing. Due to its excellent corrosion protection, it can also be used for outboard motors and for two-stroke scooters with or without water cooling.

Can be used with:

API TC / TC-W 3; JASO FD | Global GD; ISO-L-EGD; 2-Stroke DFI; Husquarna 272; Piaggio Hexagon

Mixing ratio: 5 liters 1:100 = 50 ml 4 liters 1:100 = 40 ml 3 liters 1:100 = 30 ml 2 liters 1:100 = 20 ml

1 liter 1:100 = 10 ml

		PU			PU
Art. no. 0420075	1 liter	12	Art. no. 0420020	60 liters	1
Art. no. 0420050	5 liters	1	Art. no. 0420010	205 liters	1
Art. no. 0420030	20 liters	1			

Special fuel 2T (Alkylate petrol)



KWF certified 2-stroke special fuel

Ready for operational use, tested 2-stroke fuel mixture for many small engine-driven devices such as chain saws, hedge trimmers, leaf blowers, lawn mowers, which can be operated with a two-stroke mixture (in a ratio of 1:50). The special fuel, with the assigned KWF test mark, can usually be utilised without any problems when the manufacturer's specifications regarding servicing, maintenance and operation of the equipment are always observed. It can be necessary under certain circumstances to adjust the carburettor setting of the engine to the low-emission and therefore for environmentally friendly fuel. Increased soot formation can occur initially when switching over from conventional fuel to special fuel 2-T because deposits in the engine will be burnt off. Problems with compatibility with other materials such as paints or seals are not to be expected.

		PU
Art. no. 0465050	5 liters	3
Art. no. 0463035	20 liters	1
Art. no. 0460035	60 liters	1

	ı	-0
Art. no. 0460017	200 liters	1
Art. no. 0460000	920 liters IBC	1



Special fuel 4T (alkaline petrol)



For ALL 4-stroke engines, such as lawn mowers, milling cutters or go-carts

Ready for operational use, tested 4-stroke fuel mixture for many small engine-driven devices such as chain saws, hedge trimmers, leaf blowers, lawn mowers, which can be operated with a two-stroke mixture.

Advantages:

- Synthetic, low-emission petrol
- Low-benzene
- Extremely low odour level Ideal for use in go-kart centres, for example, and proven many times over
- Low-emission and environmentally friendly
- Clean combustion, low soot formation

		PU
Art. no. 0461010	25 liters	1
Art. no. 0460517	200 liters	1





Emkoclean S186



Cold degreaser / cold cleaner free of halogenated hydrocarbons and aromatics

Solvent-based. It possesses excellent dissolving power against natural and synthetic oils as well as greases and can be utilised for all degreasing activities and cleaning work in processes for wash-down, immersion, spraying and flooding. Its application is particularly recommended where, for safety reasons, physiologically harmful solvents or those with a low flash point should not be utilised. Emkoclean S 186 can dissolve tar, waxes, natural resins and synthetic resins and is particularly recommended for cleaning painted or primed parts. ATTENTION: Cold cleaners may only be utilised in conjunction with installed light liquid separators (oil separators).

Technical data:

• Density at 15 °C: 0.760 g/cm³ • Refractive index: 1.424 • Flash point: 62 °C

• Dielectric strength: 160 Kv/cm

• Evaporation number: 90 - 100 (ether = 1)

		PU
Art. no. 8304033	20 liters	1
Art. no. 8304022	60 liters	1
Art. no. 8304012	200 liters	1

Emkoclean HP 2000



Biodegradable and versatile cleaning concentrate

The product is excellently suited for cleaning machinery, vehicles, floors, motors and engines in industry, households, agriculture and repair workshops. Applicable in processes with dipping, wiping and washing off with a preparation concentration of 5-50% (depending on the type and degree of soiling). Also ideal in high-pressure and steam-blasting devices or equipment, as heating up to 80 °C increases the cleaning effect (approx. 0.5 - 3% to be metered on the lance).

Technical data:

- Appearance/colour: clear, light yellow
- Density at 20 °C 1.09 kg/m³
- pH value (concentration): 10.8
- Density at pH value (1% solution): 7.6

Concentration is determined by titration:

- Sample: 50 ml
- Standard solution: 0.1 N hydrochloric acid Factor: 0.167
- Indicator: bromophenol blue

		PU
Art. no. 8307060	5 liters	4
Art. no. 8307032	20 liters	1
Art. no. 8307022	60 liters	1
Art. no. 8307010	205 liters	1



Emkoroc PG



Fully synthetic compressed air oil

Soluble in water and biodegradable, for the lubrication of compressed air tools such as hammers, vibration plates, chisels, drills, earth rockets etc. It enables trouble-free work even at temperatures below -25 °C.

The product is >90% biodegradable.

This product is not miscible with mineral products!

Technical data:

- Density at 15 °C: 1.095 kg/l
- Flow point: -51 °C
- Viscosity at 40 °C: 10.00 mm²/s
- pH value 10%: 8.5 (in water)

		PU
Art. no. 3281050	5 liters	4
Art. no. 3281030	20 liters	1
Art. no. 3281010	205 liters	1

Emkoroc MB 68, 100



Drilling oil and air hammer oil for pneumatic tools

Emkoroc MB 68 and MB 100 is a lubricating oil which is based on mineral base oils, and is utilised for the lubrication of heavy-duty hammer drills, pneumatic tools and jackhammers which will be used in outside areas or closed areas such as mine shafts or tunnels.

Technical data: MB 68

- Density at 15 °C: 875 kg/m3
- Kinetic Viscosity at 40 °C: 68 mm²/s.
- Kinetic Viscosity at 100°C: 8.7 mm²/s.
- Viscosity Index: 102
- Flash point COC: 228 °C
- Pour point: -27 °C

Can be used with: ISO 6743-11 PAB

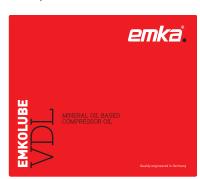
Emkoroc MB 68		PU
Art. no. 3274030	20 liters	1
Art. no. 3274020	60 liters	1
Art. no. 3274010	205 liters	1

MB 100

- Density at 15 °C: 882 kg/m3
- Kinetic Viscosity at 40 °C: 100 mm²/s
- Kinetic Viscosity at 100°C: 11.0 mm²/s
- Viscosity Index: 102
- Flash point COC: 226 °C
- Pour point: -27 °C

Emkoroc MB 100		PU
Art. no. 3275050	5 liters	4
Art. no. 3275030	20 liters	4
Art. no. 3275010	205 liters	1

Emkolube VDL Range 100, 150



Mineral oil-based compressor oils

Mineral, zinc-free and ash-free compressor oil for the lubrication of piston compressors and vane or impeller compressors (vacuum pumps). Its modern additive package means that it can effectively ensure optimum lubrication performance and reliable wear protection over the entire temperature range. In addition, it minimises the tendency for coke build up and the formation of flammable residues. The product can also be utilised for recirculating lubrication of diesel engines and power units when the manufacturer does not prescribe HP engine oil.

Can be used with:

DIN 51506 VBL/VCL/VDL ISO/DP 6521 DAA/DAB/DAH/DAG

	PU		
	Art. no. 3244050	5 liters	4
	Art. no. 3244030	20 liters	1
	Art. no. 3244020	60 liters	1
	Art no 3244010	205 liters	1

Emkolube VDL 150			
	Art. no. 3245050	5 liters	4
	Art. no. 3245030	20 liters	1
	Art. no. 3245020	60 liters	1
	Art. no. 3245010	205 liters	1



Emkolube SC Range 32, 46, 68



Special mineral oil-based compressor oils

Designed for use in multi-cell and screw compressors with oil-injection cooling. They will be preferably utilised in screw compressors and are particularly wear-reducing and load-absorbing. High-pressure (EP) additives effectively protect the bearings and power-transmitting components of the compressor against wear. Especially for screw compressors corresponding to VDL; DIN 51 506. The main task of the oil in the screw compressor is cooling and sealing in the compression chamber. The oils which are available in the Emkolube SC range possess an excellent oxidation stability due to the use of high-quality base oils in combination with special antioxidants, which thereby guarantees a very long service life for the oil even when subjected to high loads, even up to 110 °C compression temperature.

Emkolube SC 32	PU	
Art. no. 3231030	20 liters	1
Art. no. 3231020	60 liters	1
Art. no. 3231010	205 liters	1

	PU		
	Art. no. 3230050	5 liters	1
	Art. no. 3230030	20 liters	1
	Art. no. 3230020	60 liters	1
	Art. no. 3230010	205 liters	1

Emkolube SC 68	PU	
Art. no. 3232030	20 liters	1
Art. no. 3232020	60 liters	1
Art. no. 3232010	205 liters	1

Syntolube SC Range 32, 46, 68, 100



Fully synthetic (PAO) compressor oil for piston-driven compressors, screw compressors and multiple-cell compressors

The oils available in the Syntolube SC range are special compressor oils based on synthetic (PAO) base oils and state-of-the-art additives, which have been developed for use in piston compressors, screw compressors and multiple-cell compressors. They are characterised by their excellent lubrication performance and high thermal stability, which therefore make their utilisation in a very wide temperature range possible, also due to their inherent, very good viscosity-temperature behaviour. The outstanding corrosion protection and the long-lasting protection provided against ageing are additional outstanding properties which thereby guarantee a long, trouble-free service life.

Can be used with:

DIN 51506 VDL; ISO 6743-3 DAA/DAB/DAG/DAH/DAJ/DVA/L-HV

Syntolube SC 32		PU	Syntolube SC 46		PU
Art. no. 3220130	20 liters	1	Art. no. 3220230	20 liters	1
Art. no. 3220120	60 liters	1	Art. no. 3220220	60 liters	1
Art. no. 3220110	205 liters	1	Art. no. 3220210	205 liters	1
Art. no. 3220100	Tank	1	Art. no. 3220200	Tank	1
Syntolube SC 68		PU	Syntolube SC 100		PU
Syntolube SC 68 Art. no. 3220330	20 liters	PU 1	Syntolube SC 100 Art. no. 3220430	20 liters	PU 1
	20 liters 60 liters			20 liters 60 liters	PU 1 1
Art. no. 3220330		1	Art. no. 3220430		PU 1 1 1 1



AdBlue®



Liquid urea solution

AdBlue® is an aqueous solution which comprises 32.5% urea and 67.5% distilled water according to ISO standard 22241. It is normally utilised in diesel vehicles which are equipped with SCR technology. AdBlue® is not considered be harmful. It is biodegradable, water soluble and colourless. Utilising AdBlue® enables vehicle manufacturers to fulfil the strict emission standards of the EU.

		PU
Art. no. 6707050	5 liters	4
Art. no. 6707440	10 liters	1
Art. no. 6707030	20 liters	1
Art. no. 6707025	210 liters	1
Art. no. 6707001	1000 L IBC	1
Art. no. 6707011	Tank	1





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