

emka®

Quality engineered in Germany

EMKA GREENLINE 2024/25

Bio lubricants and bio hydraulic oils,
petrol for power tools (alkylate petrol),
garden equipment oils



www.emka-oil.de

The future begins today,
together for a better future!



BIO LUBRICANTS

- biodegradable synthetic oils with an environmentally friendly additive
- excellent properties under high pressure and temperature
- no effect on seals/gaskets
- very good lubrication properties
- minimal foaming power
- viscosity classes 22, 32, 46, 68 mm / at 40°C
- biodegradability according to OECD 301B and OECD 301D

EMKA GREENLINE-PRODUCT RANGE

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Hydrostar PFL



Environmentally friendly virgin-based hydraulic oil (HETG) (natural esters)

Hydrostar PFL is a rapidly biodegradable hydraulic oil based on renewable raw materials (>95%) and distinguished with the European Environmental Label (EEL). It is designed for use under the most demanding of requirements in mobile and stationary hydraulic systems in construction, water, agriculture and forestry, where there could be a risk to the environment through leaks and where a hydraulic oil according to ISO 15380 (HETG) is recommended.

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

Can be used with:

ISO 15380: HETG; European Environmental Label (EEL / Euro Margerite)

		VPE
Art. no. 2230030	20 liter	1
Art. no. 2230010	205 liters	1

Hydrostar HES



Environmentally friendly multigrade hydraulic oil (HEES) based on synthetic esters

Hydrostar HES is a rapidly biodegradable synthetic hydraulic oil 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 use under the most demanding of requirements in mobile and stationary hydraulic systems in construction, water, agriculture and forestry, where there could be a risk to the environment through leaks 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; European Environmental Label (EEL / Euro Margerite); Swedish Standard SS15 54 34

		VPE			VPE
Art. no. 2220050	5 liter	4	Art. no. 2220010	205 liters	1
Art. no. 2220030	20 liters	1	Art. no. 2220001	IBC	1
Art. no. 2220020	60 liters	1			

Hydrostar HES GSE-Range 22, 32, 46, 68



Environmentally friendly hydraulic oil (HEES) based on saturated esters

The hydraulic oils in the Hydrostar HES GSE Range are synthetic, rapidly biodegradable hydraulic oils (>70% in 28 days) based on saturated esters. They are optimally suited for use under the most demanding of requirements in mobile and stationary hydraulic systems in construction, water, agriculture and forestry, where there could be a risk to the environment through leaks and where a hydraulic oil according to ISO 15380 (HEES) is recommended. They can be used in a wide operating temperature range due to their high viscosity index with excellent flow characteristics. When converting over to the Hydrostar HES GSE Range, 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

Hydrostar HES GSE 22

		VPE
Art. no. 2225130	20 liters	4
Art. no. 2225120	60 liters	1
Art. no. 2225110	205 liters	1
Art. no. 2225101	IBC	1

Hydrostar HES GSE 32		VPE
Art. no. 2225230	20 liters	4
Art. no. 2225220	60 liters	1
Art. no. 2225210	205 liters	1
Art. no. 2225201	IBC	1

Hydrostar HES GSE 46		VPE
Art. no. 2225030	20 liters	4
Art. no. 2225020	60 liters	1
Art. no. 2225010	205 liters	1
Art. no. 2225001	IBC	1

Hydrostar HES GSE 68		VPE
Art. no. 2225330	20 liters	4
Art. no. 2225320	60 liters	1
Art. no. 2225310	205 liters	1
Art. no. 2225301	IBC	1

Hydrostar AOH 46



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

Hydrostar AOH 46 is a rapidly biodegradable hydraulic oil based on synthetic polyalphaolefins. Due to its multigrade characteristics (VG 32- 68), it is optimally suited for use under the most demanding of requirements in mobile and stationary hydraulic systems in construction, water, agriculture and forestry, where there could be a risk to the environment through leaks.

The multigrade 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)

		VPE
Art. no. 2223030	20 liters	1
Art. no. 2223010	205 liters	1
Art. no. 2223000	IBC	1

BIO CHAIN SAW OILS

- High-quality bio chainsaw oils for smooth and non-gumming applications with corrosion protection
- Meet the strict requirements for environmental compatibility
- Excellent adhesion and lubricating properties as well as ageing stability
- Very economical consumption (thanks to its lubricity, savings potential of up to 40% compared to mineral oils)
- Around 12% lower temperature during use (less tool wear)
- Can be used universally in summer and winter (tried and tested at all temperatures)
- Excellent adhesion and cold resistance due to additives
- Environmentally friendly, as they are more than 60% biodegradable within 28 days (according to the OECD 301D test)
- Contact with whilst working does not lead to health problems



Emkotac Green Forest



Bio chainsaw adhesive oil for portable saws

Emkotac Green Forest is a high-performances biodegradable chainsaw adhesive oil based on vegetable oils and is free of synthetic and mineral oil. A special additive package protects the product from premature ageing and/or gumming, optimises the viscosity position and improves the adhesion characteristics and gliding properties.

As a result, this achieves lower wear on the chain, sprocket and blade.

The special additive formulation ensures that it is suitable for year-round use, even under extreme harsh winter conditions (cold test for 72 h/-18°C and pour point -30°C).

The KWF (competence centre for forestry work, forestry technology and wood logistics in Germany and Europe) has confirmed its suitability for use without restrictions.

Emkotac Green Forest must never be mixed with synthetic or mineral oil, otherwise technical faults may occur. It is not water-soluble, so in the event of leaks, the product remains largely in the upper soil layers and is therefore not carried into the groundwater. The product fulfils the criteria for the EU Ecolabel and „Blue Angel“ environmental labels. The biodegradability is >98% in 21 days in accordance with CEC-L-33-A393.

		VPE		VPE
Art. no. 3461070	1 liter	12	Art. no. 3461020	60 liters 1
Art. no. 3461050	5 liters	4	Art. no. 3461010	205 liters 1
Art. no. 3461030	20 liters	1	Art. no. 3461001	IBC 1

Emkotac Green Forest 220



Bio chainsaw oil for harvesters

Emkotac Green Forest 220 is a biodegradable high-performance chainsaw adhesive oil based on vegetable oils, free of 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 gumming, optimises the viscosity position and improves the adhesion characteristics and gliding properties.

It can be used all year round and has excellent adhesion, wear and corrosion protection properties.

Emkotac Green Forest 220 must never be mixed with synthetic oil or mineral oil, otherwise technical faults may occur. It is not water-soluble, so in the event of leaks, the product remains largely in the upper soil layers and is therefore not carried 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.

		VPE			VPE
Art. no. 3453030	20 liters	1	Art. no. 3453010	205 liters	1
Art. no. 3453020	60 liters	1	Art. no. 3453001	IBC	1

Emkotrenn EST 45



Concrete release agent, generally biodegradable

Emkotrenn EST 45 is a generally biodegradable mineral oil-based special release agent for the concrete industry and can be used for all common formwork or as mixer protection agent. It ensures easy and quick release of the formwork 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 any build-ups in inaccessible places. The product is 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.

Technical data

- Appearance: gold-yellow
- Density at 15°C: 900 kg/m³ DIN 51 757
- Viscosity at 40°C: 9.5 mm²/s DIN 51 562-1
- Flash point: >180°C DIN EN ISO 2719
- Pour point: <-10°C DIN ISO 3016
- Biodegradability: >56% OECD 301 B
- GIS code: BTM 10

		VPE
Art. no. 6135030	20 liters	1
Art. no. 6135010	205 liters	1
Art. no. 6135000	IBC	1

Emkotrenn BFT



Biodegradable concrete release agent based on renewable raw materials

Emkotrenn BFT is a biodegradable special release agent for the concrete industry based on renewable raw materials, which prevents adhesion to all currently common formwork, tools and loading surfaces of trucks (can also be used as an asphalt release agent).

It builds up a stable and pressure-resistant release film and also prevents any build-ups in inaccessible places.

This ensures easy, quick and material-friendly release of the formwork.

The product is 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 application.

Technical data

- Appearance: gold-yellow
- Density at 15°C: 900 kg/m³ DIN 51 757
- Viscosity at 40°C: 9.5 mm²/s DIN 51 562-1
- Flash point: >180°C DIN EN ISO 2719
- Pour point: <-10°C DIN ISO 3016
- Biodegradability: 87% OECD 301 B
- GIS code: BTM 10

		VPE
Art. no. 6128030	20 liters	1
Art. no. 6128010	205 liters	1
Art. no. 6128001	IBC	1

Lagerstar PFL



Rapidly biodegradable multi-purpose grease

Lagerstar PFL is a rapidly biodegradable multi-purpose grease based on rapeseed oil. It is used for lubrication when there is a risk to soil or water, such as in agriculture and forestry or on water bodies, such as at lock gates. The product can also be easily conveyed in central lubrication systems. $\geq 60\%$ biodegradable according to OECD 301 B.

Can be used with:

MAN 283 Li-P2; MB DBL 6804.00 Sheet 267.0; Volvo Standard 1277.18

Technical data:

- K2E-20
- NLGI-Class 2
- Drip point: $\geq 130^\circ\text{C}$
- ISO-L-XB(F)BEA 2
- Operating temperature: $-20^\circ\text{C}/+80^\circ\text{C}$
- Soap basis: Calcium

VPE		
Art. no. 4130430	15 kg	1
Art. no. 4130120	25 kg	1

Lagerstar ZEN-UWF



Rapidly biodegradable fluid-type grease

Lagerstar ZEN-UWF is a rapidly biodegradable fluid-type grease based on synthetic esters. It is used with central lubrication systems for the lubrication of roller bearings and slide bearings in commercial vehicles, construction machinery and machine tools. Furthermore, it can also be used in gearboxes which are subjected to low to medium loads. $\geq 60\%$ biodegradable according to OECD 301 B.

Can be used with:

DIN EN 16807; SKF; MAN 283 Li-P 00/000-B

Technical data:

- GPE 00/000K-40
- NLGI Class 00/000
- Drip point: $\geq 150^\circ\text{C}$
- VKA-welding force: 2400 N
- ISO-L-X-DCEB-00/000
- Operating temperature: $-40^\circ\text{C}/+120^\circ\text{C}$
- Soap basis: lithium/calcium

VPE		
Art. no. 4325130	18 kg	1

Special fuel 2T (alkylate petrol)



KWF certified 2-stroke special fuel

A ready-to-use, tested 2-stroke fuel mixture for lots of small engine-driven equipment such as chainsaws, hedge trimmers, leaf blowers and lawn mowers, which can be operated with a two-stroke mixture (in a ratio of 1:50). The special fuel with the KWF test mark can normally be used without any problems when the manufacturer's specifications regarding maintenance and operation of the equipment are observed. It may 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 2T because deposits in the engine will be burnt off. Problems concerning compatibility with other materials such as paints or seals are not to be expected.

VPE			VPE		
Art. no. 0465050	5 liters	3	Art. no. 0460017	200 liters	1
Art. no. 0463035	20 liters	1	Art. no. 0460000	920 liters IBC	1
Art. no. 0460035	60 liters	1			

Uni-Garden HD SAE 30



Lawnmower/garden equipment engine oil

Uni-Garden HD SAE 30 is a mineral oil-based HD mono-grade engine oil for 4-stroke engines (also with a catalytic converter) in garden equipment, ideally suited for lawn mowers. Thanks to its high-quality base oil and high additive content, it guarantees very good lubrication, excellent wear and corrosion protection, as well as maximum engine cleanliness, which enables a long service life and operational reliability of the engine.

The operating regulations of the equipment manufacturer must be observed.

Can be used with:

API SC, API CF; ACEA B4

		VPE
Art. no. 0265070	1 liter	12
Art. no. 0265050	5 liters	4
Art. no. 0265030	20 liters	1

Uni-Garden HD SAE 10W30



Engine oil for garden equipment

Uni-Garden HD SAE 10W30 is a mineral oil-based engine oil for 4-stroke engines (also with a catalytic converter) in lawn mowers, snow blowers, chippers, rotary tillers or emergency power units. Thanks to its high-quality base oil and high additive content, it guarantees optimal lubrication, excellent wear and corrosion protection, as well as maximum engine cleanliness, which enables a long service life and operational reliability of the engine.

The operating regulations of the equipment manufacturer must be observed.

Can be used with:

API SN/CF; ACEA A3/B4; Briggs & Stratton; Honda

		VPE
Art. no. 0266070	1 liter	12
Art. no. 0266050	5 liters	4
Art. no. 0266030	20 liters	1

Special fuel 4T (alkaline petrol)



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

For ALL 4-stroke engines, such as lawn mowers, milling tools or go-carts
A ready-to-use, tested 4-stroke fuel for lots of small engine-driven equipment such as chainsaws, hedge trimmers, leaf blowers and lawn mowers, which can be operated with a four-stroke special fuel

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

		VPE
Art. no. 0461050	5 liters	3
Art. no. 0461010	25 liters	1
Art. no. 0460517	200 liters	1

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