Technical data sheet

OEKOSYNT HEES

Rapidly biodegradable hydraulic oils

Description

MOTOREX OEKOSYNT HEES hydraulic oils are rapidly biodegradable and based on **saturated** ester liquids. The zinc-free additives selected for optimum effectiveness provide extremely reliable lubrication over a wide temperature range and for the entire period of use.

Advantages

- rapidly biodegradable
- very good viscosity-temperature characteristics
- high viscosity index
- excellent shear stability
- very good corrosion and non-ferrous-metal protection
- excellent protection against wear
- outstanding stability in respect of oxidation, ageing and hydrolysis
- compatible with paint coatings, elastomers and seals generally used for mineral oil.

Field of application

MOTOREX OEKOSYNT HEES is suitable for all hydraulic systems fitted in snowcats, construction equipment, equipment used for forestry and agriculture, and areas where hydraulic oils are required which biodegrade quickly, such as in gravel pits, on building sites and bodies of water, underground mining, forestry and agricultural business, power plants, etc.

Specifications

- Satisfies the ecological and technical requirements for HEES fluids in accordance with DIN ISO 15380. (The viscosity 15 is inspired by ISO VG 22)
- Satisfies criteria for compatibility with non-ferrous metals in accordance with VDMA 24570 (Linde Test).
- Complies with Performance Levels HLP and HVLP as per DIN 51 524.
- Approved by: Bosch Rexroth A4VSO125, KAISER AG, vehicle plant, Prinoth AG
- Satisfies the requirements of Sauer – Danfoss Flywheel – and MPH – Test: H1P078, H1B110

Please note

It is essential to follow guidelines in accordance with DIN ISO 15380/A.1 and the manufacturer's specifications when changing from conventional hydraulic oils to rapidly biodegradable hydraulic fluids.

Technical data

Properties	Unit	Test according to	Values				
Viscosity class		ISO VG	15	22	32	46	68
Colour		DIN ISO 2049	green	green	green	green	green
Density at 20 °C	g/ml	ASTM D 4052	0.883	0.902	0.914	0.914	0.917
Viscosity at 40 °C	mm²/s	DIN 51562-1	16	22.7	32.9	46.8	69.4
Viscosity at 100 °C	mm²/s	DIN 51562-1	3.83	5.0	6.5	8.2	11.1
Viscosity index		DIN ISO 2909	135	153	156	150	152
Pourpoint	°C	ASTM D 5950	-69	-60	-60	-54	-54
Flash point	°C	DIN EN ISO 2592	>180	>180	>200	>200	>200
Iodine number		DIN 53241-1	<5	<5	<5	<5	<5
Biological degradability	%	ISO 9439 / OECD 301B	>75	>75	>75	>75	>75

Water hazard class: WGK 1
Disposal code: EWC 130 112

The above information is subject to change without prior notice, although it is in accordance with current standards. Performance characteristics indicated are based on usual tolerances which occur during measuring and production using the latest technology. A safety data sheet is available.

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