

# Product information

## Meguin Hydraulikoel HEES 46 (biodegradable)



[www.blauer-engel.de/uz178](http://www.blauer-engel.de/uz178)

### Description

Biodegradable hydraulic oil based on high quality synthetic esters. The product offers excellent viscosity-temperature properties. It can be used all year round thanks to its excellent low temperature properties. Its EP additives and polar adhesion capacity provide outstanding wear protection and very good protection against rust and corrosion.

Meguin hydraulic oil HEES 46 (biodegradable) is toxicologically safe, quickly biodegradable and miscible with all mineral oil-based products. It is particularly suitable for use in the hydraulic systems of equipment that is primarily used outdoors, such as mobile cranes and excavators for agricultural and forestry use, floating excavators, lock gate hydraulic systems, ski piste equipment, etc. that is subject to large fluctuations in temperature and where there is a risk of accidental leakage into the environment.

### Specifications and approvals:

Blauer Engel • Hydrauliköl VDMA 24568 HEES 46 • Hydrauliköl DIN 51524 Teil2 HLP 46 • Hydrauliköl DIN 51524 Teil 2 HLP 32 • Hydrauliköl DIN 51524-Teil 2 HLP 68 • Hydrauliköl DIN 51524 HVLP 46

### Characteristic data

ISO viscosity class	VG 46 DIN 51519
Density at 15 °C	0,920 g/cm <sup>3</sup> DIN 51757
Viscosity at 40 °C	46 mm <sup>2</sup> /s ASTM D 7042-04
Viscosity at 100 °C	9,4 mm <sup>2</sup> /s ASTM D 7042-04
Viscosity index	194 DIN ISO 2909
Pour point	-45 °C DIN ISO 3016
Flash point	280 °C DIN ISO 2592
Demulgation characteristics at 54 °C	20 min DIN ISO 6614
Air separation capacity	<5 min DIN ISO 9120
Foaming behavior at 24 °C	30/0 ml ISO 6247
Foaming behavior at 93.5 °C	50/0 ml ISO 6247
Foaming behavior at 24 °C after 93.5 °C	30/0 ml ISO 6247
Neutralization number	0,5 mg KOH/g DIN 51558 Teil 1

### Characteristic data

Oxide ash	<0,01 g/100g DIN EN ISO 6245
Corrosion effect on steel	0-A DIN ISO 7120
Corrosion effect on copper	1-100 A3 DIN EN ISO 2160
FZG gear rig test, standard test A/8, 3/90	Schadenskraftstufe >12, Spez.Gew.Änderung <0,27 mg/KWh DIN 51354
Behavior towards nitrile rubber (NBR) seals	verträglich DIN 53538 Teil 1
Biodegradability after 21 days	> 90 % CEC L-33-T-82

### Available pack sizes

20 l Canister plastic	Part no. 8721 D-GB
60 l Drum sheet metal	Part no. 8722 D-GB
200 l Drum sheet metal	Part no. 8723 D-GB
1000 l Deposit container	Part no. 9594 D-GB