

## perma Bio oil, high viscosity S069

Rapidly biodegradable multi-purpose oil

### Advantages for your applications

- Multi-purpose oil
- Rapidly biodegradable
- Water hazard class 1
- Meet CLP requirements
- Excellent viscosity-temperature relation
- Good antiwear behavior
- Very adhesive
- FZG test A/8.3/90 scuffing load stage  $\geq 12$

### Description

perma Bio oil, high viscosity S069 is a fully synthetic multi-purpose oil which fall under water hazard class 1, i.e. it is not hazardous to water. It has an excellent viscosity-temperature relation and a wide service temperature range.

perma Bio oil, high viscosity S069 protect against corrosion and wear and it is very adhesive and resistant to ageing and oxidation. In the FZG test, DIN 51354 pt 2 (A/8.3/90) this oil has a scuffing load stage  $\geq 12$  and meet the CLP requirements. In accordance with CEC-L-33-A-94, biodegradability after 21 days is  $> 70\%$ .

### Application

perma Bio oil, high viscosity S069 is used for the lubrication of open drive and conveyor chains, spindles and joints as well as for spur, bevel and worm gears and pertinent machine elements, such as couplings, plain and rolling bearings. perma Bio oil, high viscosity S069 is used in agricultural and forestry equipment, water treatment installations. perma Bio oil, high viscosity S069 is especially suitable for applications where oil leakage might contaminate the environment.

### Application information

perma Bio oil, high viscosity S069 is a lubricant especially developed for the perma Lubrication Systems. To ensure adequate metering and maintenance-free lubrication, this product is only available in an perma Lubrication System.

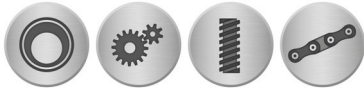
Depending on temperature and exposure time, synthetic lubricants on an ester base may have an impact on the functional capacity of rubber-elastic sealing materials. Seals made of NBR materials can be used at permanent temperatures up to max. 80 °C. For higher temperatures we recommend to use seals made of FKM materials. Paints may be attacked by synthetic lubricants. When applying perma Bio oil, high viscosity S069 we recommend the use of two-component paints for interior coating.

### Shelf life

Shelf life is approx. 12 months if the product is stored in its unopened original container in a dry and frost-protected place.

### Packaging

- perma lubrication systems
- Bottle 1 ltr
- Bottle 5 ltr



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### Product data

Base oil	ester
ISO VG DIN 51519	460
Cinematic oil viscosity, DIN 51561, at 40 °C, mm <sup>2</sup> /s at 100 °C, mm <sup>2</sup> /s	460 52
Colour	orange
Density, DIN 51757, at 20 °C, g/cm <sup>3</sup> , approx.	0,95
Viscosity index, DIN ISO 2909	> 160
Pourpoint, DIN ISO 3016, °C	< -20
Service temperature range, °C	- 20 to 110
Elastomer compatibility towards 72 NBR 902 at 100 °C / 168 h change in volume % change in hardness (Shore A), approx.	< +5 -4