

SF09 perma bio grease

Rapidly biodegradable special grease

Description

perma SF09 is a fully synthetic and rapidly biodegradable special grease classified in water pollution category 1. In accordance with the CEC-L-33-A-93 test, biodegradability after 21 days is > 70%.

perma SF09 is very resistant to water, protects against corrosion, shows a good load-carrying capacity and ageing resistance.

Application notes

perma SF09 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.

perma SF09

- Rapidly biodegradable
- Water pollution category WGK 1
- Very adhesive
- Fully synthetic
- Very resistant to water
- Good load-carrying capacity
- Good low-temperature properties
- Good pumpability

Application

perma SF09 should be used wherever there is a risk of the lubricant contaminating the soil or water. It is therefore recommended for applications in water treatment plants, hydroelectric power plants, installations in ports, paper mills, etc., to lubricate rolling and plain bearings, chains, joints, open drives, ropes, racks and gear rims. It is also suitable for the lubrication of wood-working machines, construction machines, agricultural and forestry equipment as well as truck chassis. perma SF09 can also be used in water sports vehicles, bicycles, lawn mowers and similar outdoor equipment.

Minimum shelf life

The minimum shelf life is approx. 12 months if the product is stored in its unopened original container in a dry place.

Pack size

perma Lubrication Systems
400 g - cartridges on request (for pre-lubrication with manual grease gun)

Source of supply

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Product data

Base oil	ester
Thickener	polyurea
Base oil viscosity, DIN 51562, at 40°C, mm ² /s	100
at 100°C, mm ² /s	28
Colour	brown
Water pollution category	1
Density, DIN 51757, at 20 °C, g/cm ³ , approx.	0.93
Drop point, DIN ISO 2176, °C	> 220
Biodegradability, CEC-L-33-A-93, 21 days, %	> 70
Speed factor, (n x d _m), approx.	3 x 10 ⁵
Consistency, NLGI grade, DIN 51818	2
Service temperature range, °C	– 40 to 140

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Compatibility with elastomers

168 h / 100 °C, material	After storage in perma SF09	
72 NBR 902	change in weight %	< 7
	change in volume %	< 10
	change in Shore hardness, approx.	-3

Degradation behaviour

Micro organisms such as bacteria, fungi or algae biodegrade organic substances by transforming them mainly to water and carbon dioxide.

Classification acc. to CEC-L-33-A-93 after 21 days	Degradability:		
	> 70%	=	rapidly biodegradable
	20 – 70%	=	potentially biodegradable
	< 20%	=	not biodegradable

Testing procedure

CEC-L-33-A-93

150 ml of a mineral substrate containing approx. 7.5 g of the test material (lubricant) are mixed with 1 ml of the inoculum (bacteria culture from sewage plants). The degradation of the test material by the bacteria cultures is observed over a period of 21 days.

Handling

Rapidly biodegradable lubricants should be handled with the same care as all other lubricating greases. Any avoidance of contamination is to the benefit of our environment.