Marine lubricants.

Sterna Bio

Synthetic hydraulic EAL (environmentally acceptable lubricant) fluid specially designed for vessel sterntubes. It complies with VGP 2013 legislation.

Use

- Product recommended for hydraulic systems operating under harsh conditions, requiring high anti-wear properties and a high viscosity index that is stable over time.
- Particularly recommended when there is risk of water contamination in order to protect the environment.

Benefits

- Biodegradability. Minimizes the effects of environmental contamination.
- Naturally high viscosity index. Works over a wide range of temperatures.
- Excellent lubricant, anti-wear, and anticorrosion properties.
- Compatible with the gaskets used in hydraulic circuits (Vito, Perbunan, NBR nitrile, Neoprene, silicone, etc.).

Specifications

- VDNA 24568 HEES class
- ISO 15380 HEES class
- EAL type for compliance with VGP 2013

Physical and chemical properties

Parameter	Units	Method	Sterna
Density 15°C	kg/l	D-4052	0.908
Flash point COC	°C	D-92	>300
Pour point	°C	D-97	-42
Viscosity at 40 °C	cSt	D-445	100
Viscosity at 100° C	cSt	D-445	18.1
Viscosity Index	-	D-2270	202
Operating temperature range	-	D-665	-20 to 90
Biodegradability after 21 days	%	CEC-L-33-aA-93	>90
FZG, fail stage, A/8.3/90	-	DIN 51354	11

Health & safety and environment

A Material Safety Data Sheet providing information on product hazards, handling precautions, first aid measures, and relevant environmental data is available for this product as per applicable legislation.