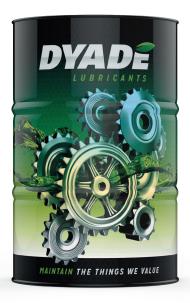
HYDRAU-PLUS BIO HTB 22

BIODEGRADABLE HYDRAULIC OILS

326101501



HYDRO TREATED BASED HIGH PERFORMANCE READILY **BIODEGRADABLE HYDRAULIC FLUID**

This range of products comprises top-quality hydraulic and hydro turbine fluids that utilize the latest hydrotreated base oil technology and ashless, zinc-free additive technology. The specialized additive packs used ensure optimal performance and an extended service life. These fluids possess superior viscosity-temperature characteristics and excellent extreme pressure and anti-wear properties, providing reliable and trouble-free performance even in high operating temperatures. With a lifespan up to five times longer than standard mineral hydraulic oils, this product is not only biodegradable and non-toxic, but also highly sustainable. Its long life and cleanliness result in less waste material, low oil filter consumption, and, thanks to very low friction, up to 5% lower energy consumption. The product also boasts excellent water separation properties, allowing for easy drainage of water from systems when intrusion occurs. Moreover, the product has very low conductivity, enabling it to function as both a transformer and

hydraulic oil. These products are highly suitable for hydraulic equipment and hydro turbines operating in environmentally sensitive areas. They can be utilized in all available hydraulic applications, as well as light gear boxes, and are perfectly suitable for general lubrication purposes. Designed for trouble-free operation, they are especially useful in cases where conventional hydraulic fluids fail, such as sludge and deposit creation at higher temperatures. They are highly recommended for high-pressure hydraulic systems or equipment operating over wide temperature ranges, where it is crucial to maintain viscositytemperature characteristics under high shear conditions. The product's high viscosity index ensures a low start-up viscosity and a stable, protective lubricating film even at high operating temperatures. These products are formulated to meet and exceed industry standards, including Denison HF-0, Eaton Vickers M-2950-S, and I-286-S. They are also suitable for use in ROV units.

PROPERTY	METHOD	VALUE
Appearance	Visual	Bright & clear
FOUT	ASTM D1298	0.860
Viscosity @ 40 °C, mm²/s	ASTM D445	22
Viscosity @ 100 °C, mm²/s	ASTM D445	5
Viscosity index	ASTM D2270	150
Flash point, °C	ASTM D92	220
Pour point, °C	ASTM D97	-35
Copper corrosion 3h @ 100 °C	ASTM D130	la
Corrosion prevention test A (distilled water)	ASTM D665	Pass
Corrosion prevention test B (sea water)	ASTM D665	Pass
Emulsion characteristics	ASTM D1401	40/40/0 (15)
TAN, (max) mg KOH/g	ASTM D664	
FZG	DIN 51 354	
Oxidation Resistance	ASTM D943	>10000
Foaming characteristics, 10 min - Sequence I	ASTM D892	Nil
Foaming characteristics, 10 min - Sequence II	ASTM D892	Nil
Foaming characteristics, 10 min - Sequence III	ASTM D892	Nil



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CATEGORY

Hydraulic Fluids

BENEFITS

- Excellent anti-wear protection
- Good emulsifying and air-release properties
- Good anti-oxidation for a long service life (up to 10.000 hours, ASTM D943)
- Lasts up to five times longer than the leading conventional hydraulic fluids
- Excellent anti-corrosion properties
- Excellent low & high temperature properties
- No sludge and deposit creation due to the absence of aromatics
- Zinc free formulation
- Low friction and therefore up to 5% less energy consumption in comparison with conventional hydraulic fluids