

Q8 Holbein Bio Xtreme 46

Superior long life readily biodegradable synthetic hydraulic fluid

Description

Q8 Holbein Bio Xtreme 46 is an exceptional biodegradable synthetic hydraulic fluid based on saturated esters, specifically designed for use in environmentally sensitive areas. Its advanced formulation makes it ideal for year-round use in both mobile and stationary hydraulic systems. Thanks to its outstanding characteristics, Q8 Holbein Bio Xtreme 46 ensures reliable performance across a wide temperature range while maintaining long-life properties up to 6000 running hours. This product is highly biodegradable (more than 80%) and contains ashless (zinc-free) anti-wear additives, making it an excellent choice for applications where environmental responsibility is a priority.

Designed using advanced synthetic technology and a unique, well-balanced additive system, Q8 Holbein Bio Xtreme 46 delivers outstanding performance across a wide range of applications. It provides exceptional oxidation and thermal stability, ensuring extended oil life and minimizing deposit formation, even in demanding high-pressure hydraulic systems. Additionally, its biodegradable nature makes it a safe choice for use in ecologically sensitive environments, where minimizing environmental impact is crucial.

It effectively protects critical components, such as precise servo and proportional valves commonly found in modern systems, from potential failures.

A key differentiator of Q8 Holbein Bio Xtreme 46 is its approval in the Bosch Rexroth RFT-APU-CL severe hydraulic pump test, confirming its superior performance under extreme operating conditions. This certification underscores its ability to protect hydraulic components even in the most demanding applications, ensuring reliability and extended equipment lifespan.

Its superior oxidation stability allows for extended intervals between oil changes, further enhancing its value. Q8 Holbein Bio Xtreme 46 also ensures greater operational reliability and long-term stable fluid viscosity due to its excellent shear stability. These remarkable properties enable this hydraulic fluid to achieve up to three times the oil life of standard hydraulic fluids while maintaining its environmentally friendly profile.

Applications

Q8 Holbein Bio Xtreme 46 is ideal for demanding hydraulic systems operating in environmentally sensitive areas, where minimizing ecological impact is crucial. Its biodegradable formulation makes it a responsible choice for applications in agriculture, forestry, waterworks, and marine environments, where hydraulic leaks could pose risks to soil, water, and wildlife. This high-performance fluid is also well-suited for industrial applications such as hydroelectric power stations, where sustainability and long-term operational reliability are essential. By using a biodegradable hydraulic fluid, industries can reduce environmental contamination, comply with strict regulations, and ensure safer operations in protected or eco-sensitive zones.

Benefits

- Readily biodegradable
- Long drain interval capability.
- Superior oxidation stability
- Exceptional anti-wear characteristics
- Excellently high viscosity index
- Limited impact on the environment
- Zinc-free additives

Specifications & Approvals

Bosch Rexroth	RDE-90235	ISO	15380 HEES (2016)
Bosch Rexroth	RDE-90245	Swedish Standard	SS 155434 AAV 46
Bosch Rexroth	RFT-APU-CL		Biodegradable

Properties

	Method	Unit	Typical
ISO Viscosity Grade	-	-	46
Colour	D 1500	-	L1.0
Density, 15 °C	D 4052	g/ml	0.919
Kin. Viscosity Base Oil at 40 °C	D 445	mm ² /s	44.7
Kin. Viscosity Base Oil at 100 °C	D 445	mm ² /s	8.4
Kinematic Viscosity, -20 °C	D 445	mm ² /s	1976
Viscosity Index	D 2270	-	167
Air Release, 50 °C	D 3427	min	3.0
Emulsion, Distilled Water, 54.4 °C	D 1401	-	40/40/0 (20min)
Foam, 5 min blowing, seq. 1-2-3	D 892	ml	0/10/0
Foam, 10 min settling, seq. 1-2-3	D 892	ml	0/0/0
Flash Point, COC	D 92	°C	262
Pour Point	D 97	°C	-60
Copper Strip, 3 h, 100 °C	D 130	-	1A
Rust Test, Proc. A and B, 24 h	D 665	-	pass
FZG Test, A/8.3/90	DIN 51354	load stage	12
Biodegradability, 28 days	OECD 301 B	%	81
Elastomer compatibility	72 NBR 902 after 1008hrs at 100°C	-	Pass
Elastomer compatibility	75 FKM 595 after 1008hrs at 130°C	-	Pass
Dynamic Seal Test, FKM life time 1008hrs at 80°C	Bosch Rexroth	-	Pass

The figures above are not a specification. They are typical figures obtained within production tolerances.