Product Data

Performance™ Bio HE 32 TG

Biodegradable hydraulic oil

Description

Castrol Performance™ Bio HE 32 TG (previously called Castrol Carelube™ HTG 32) is a biodegradable hydraulic fluid formulated using vegetable ester oil and additives to prevent corrosion, wear, and oxidation.

Application

Performance Bio HE 32 TG is recommended for use where leakage or spillage may present a risk of harm to the environment or in environmentally sensitive areas such as waterways, agriculture, forestry, and mining and construction industries. It can also be used in metalworking applications where excellent lubricity is necessary such as in cutting and deformation processes especially for steel and non ferrous materials. Performance Bio HE 32 TG is miscible with conventional mineral oilbased fluids but in order to maximise the performance benefits of these products it is recommended to minimise residues of other lubricants in the lubrication system through draining or flushing.

Performance Bio HE 32 TG is classified as meeting the requirements of ISO 6743/4 - HETG and DIN 51524 Part 4 specifications. It also demonstrates superior biodegradation performance in accordance with the CEC-L-33-A-93 and OECD 301B test methods.

Advantages

- Extremely high viscosity index (VI) & excellent thermal stability ensures lubrication and protection over a wide temperature range.
- Rapidly biodegradable ensures accidental leaks or spills have a reduced impact on the environment.
- Excellent lubricity, anti-corrosion and anti-wear characteristics prolongs machine life and reduces maintenance costs.
- Naturally good shear stability and a longer service life compared with other vegetable oil based hydraulic fluids.

Typical Characteristics

Name	Method	Units	Performance Bio HE 32 TG
Density @ 15°C / 59°F	ISO 12185 / ASTM D4052	kg/m³	921
Kinematic Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm²/s	36
Kinematic Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D445	mm²/s	8.2
Viscosity Index	ISO 2909 / ASTM D2270	-	>200
Biodegradability	OECD 301B	%	75
Biodegradability	CEC-L-33-A-93	%	99
Flash Point - open cup method	ISO 2592 / ASTM D92	°C/°F	>270/>518
Pour Point	ISO 3016 / ASTM D97	°C/°F	-33/-27
Water Separation @ 54°C / 129°F (40/37/3)	ISO 6614 / ASTM D1401	min	15
Foam Sequence I - tendency / stability	ISO 6247 / ASTM D892	ml/ml	30/0
Rust test - synthetic seawater (24 hrs)	ISO 7120 / ASTM D665B	-	Pass
FZG Gear Scuffing test - A/8.3/90	ISO 14635-1	Failure Load Stage	>12
Eaton-Vickers 35VQ/25 Vane Pump test (3000 psi, 2400 rpm, 100 hrs, 95°C / 203°F)	-	wt loss (ring & vane) mg	<5

Subject to usual manufacturing tolerances.

This product was previously called Carelube HTG 32. The name was changed in 2015.

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