



Tribol GR EB 100-0.5 PD

High Performance Grease

Description

Castrol Tribol™ GR EB 100-0.5 PD is a lithium based grease containing a synthetic base fluid working in combination with Castrol's unique **MicroFlux Trans – Plastic Deformation (MFT-PD)** additive technology.

Primarily intended for a gear box applications, the grease has a high level of chemical stability and provides excellent protection against wear, rust and corrosion.

The MFT -PD additive technology provides unsurpassed wear protection and an extremely low coefficient of friction even under extremes of pressure, vibration, shock loads, at high or low speeds.

Under severe load, components of the MFT-PD additive combination are activated, initiating an improvement of surface friction characteristics through plastic deformation. Unlike the case with conventional lubricants, the layer formed by MFT-PD provides excellent lubricity and adhesion. The load carrying area is improved and a hydrodynamic lubrication film is easier to maintain. This unique physio-chemical reaction achieves a non-sacrificial micro-smoothing of the friction surfaces.

Application

Targeted for Gear box applications especially in electric bikes.

Typical Characteristics

Name	Method	Units	Tribol GR EB 100-0.5 PD
Appearance	Visual	-	Smooth
Colour	Visual	-	Yellow
Thickner Type	-	-	Lithium
Base Oil Type	-	-	Synthetic
Consistency	ASTM D217	NLGI Grade	0-1
Penetration grease @ 25C, 60cycles	ASTM D217	1/10 mm	335-365
Dropping Point, Grease	DIN ISO 2176	°C/°F	>200/392
Viscosity, Kinematic @ 40°C/ 104 °F	ISO 3104/ASTM D445	mm ² /s	100
Viscosity Index	ISO 2909/ASTM D2270	-	160
Density @ 20 °C/68 °F	IP 530	kg/m ³	885
Four Ball Weld Load	DIN 51350 – 04	N	Min. 3000
Four Ball Wear- Scar Diameter	ASTM 2266	mm	Max. 0.6
Flow Pressure (Greases) -40 °C/-40 °F	DIN 51805	hPa	Max. 500
Oil Separation (Greases) 168h 40°C	DIN 51817	% wt	Max. 12
Oil Separation (Greases) 18 h 40°C	DIN 51817	% wt	Max.6
Shear Viscosity A-1000	DIN 51810-1	Pas	0.900 – 1.400
Shear Viscosity E-1000	DIN 51810-1	Pas	0.800 – 1.300
Copper Corrosion	ASTM D4048	Rating	Max. 1b
Water Resistance 3h 90°C	DIN 51807-1	Rating	1 – 90
Rust Test - EMCOR	ISO 11007/ASTM D6138	Rating	≤0/1

Subject to usual manufacturing tolerances.

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