Product Data

Spheerol HTM 1

High Temperature Bearing Grease Containing MoS2

Description

Spheerol™ HTM 1 is a NLGI 1, clay-thickened grease fortified with Molybdenum disulphide. It is primarily intended for the lubrication of plain and rolling element bearings operating at low speed and high temperature or under cycling conditions from ambient to high temperatures. It is based on a high quality, high viscosity mineral oil and is formulated to provide low volatility and high resistance to oxidation at high temperatures, resistance to water washout and good antiwear performance under heavy loads and low speeds. The Molybdenum disulphide in Spheerol HTM 1 makes it particularly suitable for the lubrication of cams, ways and other sliding machine elements subjected to fretting or shock loading.

Application

Spheerol HTM 1 is recommended for the lubrication of plain and rolling element bearings in applications such as oven conveyor or kiln bearings operating at low speeds and high temperatures or under cycling conditions from ambient to high temperatures. The grease will not soften and leak under high temperature conditions or harden excessively on cooling. It is particularly suited to the lubrication of cams, ways and other sliding machine elements subjected to long relubrication intervals, limited motion or shock loading. The recommended operating temperature range is 0°C/32°F to 170°C/338°F with appropriate relubrication intervals.

Advantages

- Reduced downtime and maintenance costs due to excellent protection against wear at high temperatures.
- Provides protection against fretting and shock loading.
- Will not soften and leak from bearings.
- Good resistance to water washout and steam.
- Extended intervals between relubrication due to long product life under arduous conditions.

Typical Characteristics

Name	Method	Units	Spheerol HTM 1
Appearance	Visual	-	Dark grey, smooth
Thickener type	-	-	Bentone (Clay)
Base oil	-	-	Mineral Oil
Consistency	ISO 2137 / ASTM D217	NLGI Grade	1
Worked Penetration (60 strokes @ 25ºC / 77ºF)	ISO 2137 / ASTM D217	0.1 mm	310 - 340
Worked Penetration (100,000 Strokes @ 25ºC / 77ºF) change from 60 Strokes	ISO 2137 / ASTM D217	0.1 mm	+17
Base Oil Viscosity @ 40ºC / 104ºF	ISO 3104 / ASTM D445	mm^2/s	460
Copper Corrosion (24 hrs,100ºC / 212ºF)	ASTM D4048	Rating	1a
Oxidation Stability - Rotating Pressure Vessel test	ASTM D942	pressure drop psi	10.2
Four Ball Wear test - Wear Scar Diameter (40 kgf / 75°C / 1200 rpm / 1 hr)	ISO 51350 / ASTM D2266	mm	0.5
SKF R2FB test (140°C)	SKF test method	Pass	Pass

Subject to usual manufacturing tolerances

Castrol Industrial, Technology Centre , Whitchurch Hill , Pangbourne , Reading , RG8 7QR , United Kingdom

www.castrol.com/industrial