

Product Data Sheet

Mobiltemp SHC 22 Synthetic Ultra High Speed Grease

Product Description

Mobiltemp SHC 22 is a super premium anti-wear grease which combines the unique features of a synthetic base fluid with an organo-clay (non soap) thickener.

The clay thickener provides a high drop point and excellent structural stability at high temperature. The wax free nature of the synthetic base fluid, together with its low coefficient of traction compared with mineral oils, provides excellent low temperature, oxidation stability at high temperature plus the potential for energy saving through reduced friction, lower running torque and temperature reductions in the load zone of rolling element bearings.

Benefits

Mobiltemp SHC 22 offers the following benefits:

- Outstanding high and low temperature performance
- Excellent resistance to oxidation
- Structural stability at high temperature
- Low volatility
- Reduced energy consumption (low coefficient of traction)
- Extended re-lubrication intervals
- Lead, chlorine and nitrite free

Application

Mobiltemp SHC 22 is an NLGI 3 grade anti-wear grease formulated with an ISO VG 22 base fluid to satisfy the low-friction requirements of ultra high speed rolling element bearings. It is recommended for use in machine tool spindle bearings operating in a speed range of up to one million DmN. $DmN \text{ Value} = (\text{Bearing ID} + \text{OD})\text{mm} \times \text{RPM} \div 2$.

Generally such high speed bearings require a firm grease with light viscosity base fluid having good anti-wear properties for long bearing life. It is important that the bearing is initially packed about one-third full to allow the grease to be pushed away from the ball/roller track during normal operation. If the bearing is too full, high temperatures may develop because of excessive churning of the grease.

Mobiltemp SHC 22 has a recommended operating temperature range of -50°C to +180°C, with appropriate re-lubrication intervals, making it particularly suitable for extreme temperature applications.

Health and Safety

Based on available toxicological information, it has been determined that this product poses no significant health risk when used and handled properly.

Details on handling, as well as health and safety information, can be found in the Material Safety Data Bulletin which can be obtained through Mobil Oil Company Ltd., by telephoning 01372 22 2000.

Typical physical characteristics are given in the table. These are intended as a guide to industry and are not necessarily manufacturing or marketing specifications.

Typical Characteristics

		Mobiltemp SHC 22
	Test Method	
NLGI Grade	ASTM D217	3
Thickener Type	-	Organo-clay
Structure	Visual	Smooth
Colour	Visual	Red
Penetration at 25°C, Worked	ASTM D217	280
Dropping Point, °C	ASTM D2265	260+
Viscosity of Base Fluid, cSt at 40°C	ASTM D445	22
Viscosity of Base Fluid, cSt at 100°C	ASTM D445	4.6
4-Ball Wear, Scar diam, mm	ASTM D2266	0.5
4-Ball Weld Load, kg	ASTM D2596	315
Emcor Distilled Water Wash Test	IP 220 Mod.	0-0
Water Washout Loss at 79°C, % wt	ASTM D1264	2.0

Due to continual product research and development, the information contained herein is subject to change without notice.

Mobil Oil Company Limited
Acting as Agent for Mobil Lubricants UK Limited
ExxonMobil House, Ermyn Way
Leatherhead, Surrey, KT22 8UX
Telephone: 01372 22 2000

