



MOBILITH SHC 460

DESCRIPTION

Mobilith SHC 460 grease is a supreme performance product designed for a wide variety of applications at extremes of temperature. It combines the unique features of a polyalphaolefin (PAO) synthetic base fluid with those of a high quality lithium complex thickener. The wax-free nature of the PAO base oil and the low coefficient of traction (compared with mineral oils), provide excellent low temperature pumpability and very low starting and running torque. This product offers the potential for energy savings and can reduce operating temperatures in the load zone of rolling element bearings. The lithium complex thickener contributes excellent adhesion, structural stability and resistance to water. The grease has a high level of chemical stability and is formulated with special additive combinations to provide excellent protection against wear, rust and corrosion at high and low temperatures. Mobilith SHC 460 grease is NLGI Grade 1.5 and has a base oil viscosity of ISO VG 460.

PROPERTIES & BENEFITS

The Mobil SHC brand of oils and greases are recognised and appreciated around the world for their innovation and outstanding performance. These molecular design PAO synthetic products, pioneered by ExxonMobil research scientists, symbolise the continuing commitment to using advanced technology to provide outstanding products. A key factor in the development of Mobilith SHC 460 were the close contacts between ExxonMobil scientists and application specialists with key Original Equipment Manufacturers (OEMs) to ensure that the product would provide exceptional performance in the continually evolving industrial equipment designs.

The work with equipment builders has helped confirm the results from ExxonMobil's own laboratory tests showing the exceptional performance of Mobilith SHC 460. These benefits include longer grease life, enhanced bearing protection and bearing life, wide temperature range of application, and the potential for improved mechanical efficiency and energy savings.

To combat high thermal exposure of the oil, ExxonMobil product formulation scientists chose proprietary synthetic base oil for Mobilith SHC 460 because of their exceptional thermal/oxidative resistance potential. Our scientists developed a state-of-the-art lithium complex thickener technology and used specific additives to enhance product performance.

As a result, Mobilith SHC 460 grease offers the following features and benefits:

Properties	Potential advantages and benefits
Outstanding high temperature and low temperature performance.	Wide application temperature ranges, with excellent protection at high temperatures and low torque, easy start-up at low temperatures.
Excellent protection against wear, rust and corrosion.	Reduced downtime and maintenance costs because of reduced wear, rust and corrosion.
Excellent thermal stability and oxidation resistance.	Extended service life with longer intervals between relubrication and improved bearing life.
Low traction coefficient.	Potential improved mechanical life and reduced energy consumption.
Includes high viscosity grades with high VI, no wax base stocks.	Outstanding protection of slow speed, heavily loaded bearings with good low temperature performance.
Outstanding structural stability in the presence of water.	Retains excellent grease performance in hostile aqueous environments.
Low volatility.	Helps resist viscosity increase at high temperatures to maximise relubrication intervals and bearing life.

APPLICATIONS

Mobilith SHC 460 is recommended for extended performance in nearly all shipboard grease applications. It provides particularly outstanding bearing protection under heavy loads at low to moderate speeds and in applications where water resistance is a critical factor. It has a recommended operating temperature range of -40°C to 180°C.

Application Considerations: While Mobilith SHC 460 grease is compatible with most mineral oil based products, admixture may detract from its performance. Consequently it is recommended that before changing a system to Mobilith SHC 460, the system should be thoroughly cleaned out to achieve the maximum performance benefits.

TYPICAL CHARACTERISTICS

MOBILITH SHC 460

NLGI Grade	1.5
Thickener Type	Lithium complex
Color, Visual	Red
Penetration, Worked, 25°C, ASTM D 217	305
Dropping Point, °C, ASTM D 2265	255
Viscosity of Oil, ASTM D 445 cSt @ 40°C	460
Timken OK Load, ASTM D 2509, lb	50
4-Ball Weld, ASTM D 2596, Load, Kg	250
Water Washout, ASTM D 1264, Loss @ 79°C.% wt	3
Rust Protection, ASTM D 6138	0
USSteel Mobility @ -18°C	5

HEALTH & SAFETY

Based on available information, this product is not expected to produce adverse effects on health when used for the intended application, following the recommendations provided in the Material Safety Data Sheet (MSDS).

The typical property values shown in the table are average figures given as a guide. They do not constitute a guarantee. Values may be modified without notice.