MOBIL SHC™ GREASE WT

Mobil Grease , Canada

High Performance Synthetic Grease for Wind Turbines

Product Description

Mobil SHC™ Grease 461 WT and Mobil SHC™ Grease 681 WT are specially formulated to lubricate yaw, pitch and main bearings of wind turbines. They are high performance synthetic lithium complex greases specially designed to exceed the demanding requirements of wind turbine applications at extreme temperatures. The advanced synthetic base fluid with its low traction coefficient provides excellent low temperature pumpability and very low starting and running torque.

Features and Benefits

- Superb thermal stability and oxidation resistance compared to conventional greases helps provide extended service life with longer relubrication intervals for wind turbines
- Outstanding low temperature performance compared to conventional greases provides excellent protection at low temperatures providing low torque and easy start-up at low temperatures
- Excellent rust and corrosion protection provides enhance performance in wet conditions for reduced downtime and maintenance costs compared to/versus conventional greases
- Outstanding structural stability in the presence of water helps retain grease consistency in hostile aqueous environments
- Excellent low temperature pumpability provides reliable lubrication of bearings using centralized grease systems or grease dispensers
- Low traction base oil coefficient offers potential improved mechanical life and reduced energy costs versus conventional greases
- Increased oil viscosity for extra protection with excellent low temperature properties
- No dye for improved housekeeping
- Excellent performance in the Wind Industry Riffel test

Applications

Mobil SHC Grease 461 WT is an NLGI 1.5 Grade extreme pressure grease with ISO VG 460 synthetic base fluid recommended for tough wind turbine applications. Mobil SHC Grease 681 WT is an NLGI 1.5 Grade extreme pressure grease with ISO VG 680 synthetic base fluid recommended for tough wind turbine applications requiring addition EHL protection

Mobil SHC Grease 461 WT and Mobil SHC Grease 681 WT meet most specifications of wind turbine builders and component suppliers and can demonstrated outstanding performance in the lubrication of yaw, pitch, and generator bearings either manual greased or using centralized grease systems or grease dispensers.

Recommended application temperature range of Mobil SHC Grease 461 WT for continuous operation is from -50°C to 150°C with proper regreasing intervals. Recommended application temperature range of Mobil SHC Grease 681 WT for continuous operation is from -40°C to 150°C with proper regreasing intervals.

Specifications and Approvals

This product has the following approvals:	MOBIL SHC GREASE 461 WT	MOBIL SHC GREASE 681 WT
GE Renewable Energy		X

This product meets or exceeds the requirements of:	MOBIL SHC GREASE 461 WT	MOBIL SHC GREASE 681 WT

This product meets or exceeds the requirements of:	MOBIL SHC GREASE 461 WT	MOBIL SHC GREASE 681 WT
DIN 51825: 2004-06 KPHC1-2M-50	X	X

Properties and Specifications

Property	MOBIL SHC GREASE 461 WT	MOBIL SHC GREASE 681 WT
Grade	NLGI 1.5	NLGI 1.5
Thickener Type	Lithium Complex Greases	Lithium Complex Greases
Color, Visual	Beige	Beige
Copper Strip Corrosion, Rating, ASTM D4048	1A	1A
Corrosion, Bearing, Rating, ASTM D1743	Pass	Pass
Dropping Point, °C, ASTM D2265	260	260
Flow Pressure @ -50 C, mbar, DIN 51805	975	
Four-Ball Extreme Pressure Test, Weld Load, kgf, ASTM D2596	250	250
Four-Ball Wear Test, Scar Diameter, mm, ASTM D2266	0.4	0.6
Oil Separation, 0.25 psi, 24 h @ 25 C, mass%, ASTM D1742	2.7	2.4
Oil Separation, 168 h @ 40 C, mass%, IP 121	3.3	
Penetration, 60X, 0.1 mm, ASTM D217	305	305
Penetration, Change from 60X to 100,000X, 0.1 mm, ASTM D217	17	28
Roll Stability, 0.1 mm, ASTM D1831	-2	10
SKF Emcor Rust Test, 10% Synthetic Sea Water, ASTM D6138	0.0	0.0
US Steel Mobility @ -18 C, g/min, AMS 1390	17	13.5
Viscosity @ 100 C, Base Oil, mm2/s, ASTM D445	55	74
Viscosity @ 40 C, Base Oil, mm2/s, ASTM D445	460	680
Water Washout, Loss @ 79 C, wt%, ASTM D1264	5	8

Health and Safety

Health and Safety recommendations for this product can be found on the Material Safety Data Sheet (MSDS) @ http://www.msds.exxonmobil.com/psims/psims.aspx

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Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All products may not be available locally. For more information, contact your local Imperial Oil contact or visit www.imperialoil.ca
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