



Syncon[®] WTL

Syncon WTL is a state-of-the-art, synthetic, extreme-pressure (EP) gear lubricant specifically developed for lubricating the heavily loaded gears and rolling-element bearings in gearboxes of older and new-generation wind turbine generators.

Syncon WTL is formulated with synthetic polyalphaolefin (PAO) base oils, a non-chlorinated extreme-pressure additive package and select inhibitors. It has outstanding oxidation resistance and thermal stability at high temperatures to minimize deposit formation and provide long service life. It also has outstanding low-temperature fluidity for use over a wide temperature range. The advanced additive technology provides high load-carrying capacity for outstanding protection against scuffing and wear, as well as excellent protection against rust and corrosion.

Applications

- Gearboxes of wind turbine generators
- Enclosed industrial gearboxes operating under severe-service conditions, such as heavy loads or high operating temperatures, or in extreme temperature environments
- Applications where the equipment manufacturer recommends a synthetic AGMA 6 EP gear oil

Syncon WTL meets or exceeds the requirements of the following industry specifications:

- ANSI/AGMA 9005-E02
- ANSI/AGMA/AWEA 6006-A03
- DIN 51517 Part 3, Lubricating Oils, Type CLP
- ISO 12925-1, Type CKD

Syncon WTL is approved for use in Flender gear units under their specification of 06.12.2005.

Features/Benefits

- Outstanding performance in wind turbine generator gearboxes
- Outstanding oxidation resistance and thermal stability at high temperatures
- Very high load-carrying capacity for protection against scuffing and wear
- Excellent protection against micropitting
- Protects against rust and corrosion
- Non-chlorinated additive system
- Outstanding low-temperature properties
- High viscosity index and low pour point for year-round use

**Synthetic
PAO-Based
Extreme-Pressure
Gear Lubricant For
Wind Turbine
Generators**

Contact Information

**U.S. Customer
Service:
1-800-822-6457**

**U.S. Technical
Services Hot Line:
1-800-766-0050**

**International:
+1-832-486-3363**

**E-mail address:
lubricants@
conocophillips.com**

<http://lubricants.conocophillips.com>

600 N. Dairy Ashford • 2W9000 • Houston, TX 77079



Syncon® WTL
Typical Properties

ISO Grade	320
AGMA Grade	6 EP
Specific Gravity @ 60°F	0.863
Density, lbs/gal @ 60°F	7.20
Color, ASTM D1500	1.5
Flash Point (COC), °C (°F)	246 (475)
Pour Point, °C (°F)	-45 (-49)
Viscosity,	
cSt @ 40°C	320
cSt @ 100°C	34.9
SUS @ 100°F	1,660
SUS @ 210°F	170
Viscosity Index	154
Acid Number, ASTM D974, mg KOH/g	0.83
Copper Corrosion, ASTM D130	1a
Four-Ball Wear, ASTM D4172, Scar Diameter, mm	0.35
Four-Ball Weld Load, ASTM D2783, kgf	250
FZG Micropitting Test, FVA 54/11 @ 90°C,	
Fail Stage	>10
Classification	High
FZG Scuffing Test, ASTM D5182, Failure Load Stage	>14
Rust Test, ASTM D665 A&B	Pass
Timken OK Load, ASTM D2782, lb	95

Health and Safety Information

For recommendations on safe handling and use of this product, please refer to the Material Safety Data Sheet via <http://w3.conocophillips.com/NetMSDS>.

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

Copyright © 2008 ConocoPhillips Company. The ConocoPhillips logo, Conoco, the Conoco logo, Phillips 66, the Phillips 66 logo, 76 and the 76 logo are trademarks of ConocoPhillips Company in the U.S.A. and other countries.