



Lubricants Designed, Not Refined

EcoGear® 270 XP

Full-Synthetic PAG
Wind Turbine Gear Oil

Hydrolytic Stability

Unlike PAOs, EcoGear® 270 XP will lubricate and protect gear boxes in the presence of small amounts of water.

Detergency

EcoGear® 270 XP fluids are natural detergents, so systems remain clean... free of staining or sticky residue.

All-Weather Service

Inherent low pour points, without pour point suppressants, allow for smoother start-ups in colder weather.

High Temperature Stability

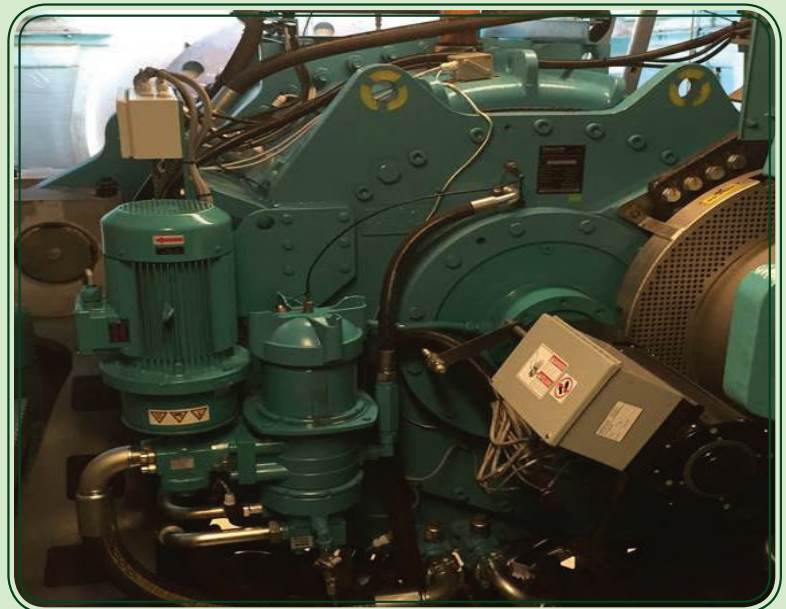
EcoGear® 270 XP oil is very stable at high temperatures and resistant to thermal degradation up to 120°C (250°F).

Non-Sludge or Varnish Forming

EcoGear® 270 XP is oxidatively stable and will not degrade to form varnish or sludge, contributing to long-term system cleanliness while extending maintenance intervals and overall service life.

About

EcoGear® 270 XP is a wind turbine lubricant made from polyether polyol and has been engineered specifically to eliminate disadvantages of other full synthetic oils. American Chemical Technologies, Inc. (ACT) has proven over the last twenty-five years that our polyether polyol based PAGs essentially clean systems with their natural detergency and the incapability of varnish formation while in operation. EcoGear® 270 XP has valuable filtration properties, better cold temperature start-ups, condensation and water forgiveness, extended service life, and offer low volatility in high temperature applications. The extreme pressure properties in EcoGear®270 XP have been formulated with an additive package created by advances in lubrication used in aerospace technology. Once activated by high specific loads and corresponding temperatures, the additive package helps to equalize surface roughness without creating abrasion. EcoGear® 270 XP is setting new standards for oils within wind turbine gearboxes where other lubricants experience short change intervals and insufficient load carrying capacity.





EcoGear® 270 XP Quantity Availability

- Bulk Tanker Truck
- 330 Gallon Poly Totes
- 55 Gallon Drums
- 5 Gallon Pails



Typical Properties

Initial Lab Test Requirements - Table 1: Tests Required Prior to Field Testing

Characteristic	Test Method	EG270XP
ISO Viscosity Grade	ISO 3448	220/320
Viscosity @ 40°C	ASTM D445	267.4 cSt
Viscosity @ 100 °C	ASTM D445	219
Viscosity Index	ASTM D2270	43.22 cSt
VI Modifiers		No
Density @ 15 °C	ASTM D4052	0.998 g/cm ³
Flash Point	ASTM D92	219 °C (426 °F)
Pour Point	ASTM D97	-25 °C (-13 °F)
Total Acid Number	ASTM D664	0.46 mgKOH/G
Specific Heat @ 15 °C	ASTM E1269	1.7 J/g*K

EcoGear® 270 XP is Different

EcoGear® 270 XP is characteristically different from PAO products that are currently being used in wind turbine gear boxes by reason of its incapability to form varnish. PAO products typically have low pour points and higher VI due to pour point suppressants and VI improvers, resulting in high acidity and heavy additive loading.

Initial Lab Test Requirements - Table 2: Tests Required Prior to Field Testing Gear, Bearing Fatigue and Wear Performance

FZG Gear Test A/8.3/90		
Pass Load Stage		14+ (3 mg)
FZG Micropitting Test	FVA 54/7	
@ 90 °C		10
FAG FE 8 (80h), mw50 & mk50	DIN 51819-B-7.5/80kN-80°C	
Roller		1 mg
Cage		40 mg

EcoGear® 270 XP



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A Global Source for Premium Synthetic Lubricants

American Chemical Technologies, Inc. (ACT) provides premium synthetic lubricants to a wide range of industries. Founded more than 30 years ago in the U.S., ACT has grown to become an international supplier of highly specialized products for industry and markets through a global network. Our commitment to advanced technology and personal service continues today as we set new standards for product performance and customer satisfaction.

Call on Us for Total Support

We want your experience with our products to be successful. ACT supports its products with a full range of sales, technical, and customer service support, including information and/or assistance to help you with product selection, handling, maintenance, and disposal. Our Check-Mate hydraulic fluid monitoring program is designed to enable users to maintain fluid quality while monitoring the condition of system components. Call ACT today for expert lubricant support.

To Learn More Call: 1-800-938-0101

Outside of the U.S. and Canada: 1-517-223-0300 (U.S.)

For An Authorized Distributor Visit:

www.AmericanChemTech.com

Ask About the Full Line of Lubricants from ACT

- EcoSafe® FR Fire Resistant Hydraulic Fluids
- EcoSafe® EHC Hydraulic Fluids for the Power Generation Industry
- EcoSafe® Revive™ Premium Turbine Fluid Additive
- EcoSafe® TF-25 Turbine Fluid
- Neptune® AW Hydraulic Fluid
- Neptune® Gear Oils
- EcoGear® Gear Oils



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