



LUBRICANTS

## Syndustrial® Turbine Oil

Phillips 66® Syndustrial Turbine Oil is a premium quality synthetic lubricant developed to meet the severe lubrication requirements of aero-derivative stationary and marine gas turbines.

Syndustrial Turbine Oil is formulated with synthetic polyol ester (POE) base oils and select ashless additives to provide outstanding performance and protection in gas turbines. It has outstanding oxidation resistance and thermal stability at high temperatures to minimize deposit formation and provide long service life. It has high load-carrying capacity and excellent affinity for metal surfaces to protect against wear. It has natural detergency for improved cleanliness, and protects against rust and corrosion. It also has excellent low-temperature properties for use over a wide temperature range.

### Applications

- Aero-derivative gas turbines

Syndustrial Turbine Oil meets the requirements of the following industry and OEM specification:

- Allison 501-k, 571-k
- General Electric GEK 97310, LM Series 500 to 6000
- Rolls-Royce RB211, Avon, Olympus, Spey and Tyne turbines
- Solar Turbines ES9-224, Revision W, Class III (Synthesized Ester) Turbine Oil
- U.S. Military MIL-PRF-23699F, Class STD Synthetic Turbine Oil

### Features/Benefits

- Outstanding oxidation resistance and thermal stability at high temperatures
- Excellent low-temperature fluidity
- High load-carrying capacity
- Protects against rust and corrosion
- Natural detergency
- High flash point for reduced fire/explosion hazard
- Extended service intervals compared with conventional mineral-oil based lubricants

**Note:** Syndustrial Turbine Oil can be used as top-off for existing competitive polyol ester turbine oils of the same quality. For information on compatibility with seals, paints and plastics, please call our Technical Support Hot Line.

**Synthetic Polyol Ester Lubricant for Land-Based Industrial & Marine Gas Turbines**

KEEPING THE  
WORLD  
RUNNING  
SMOOTHLY. 



## Syndustrial® Turbine Oil

Typical Properties	
<b>ISO Grade</b>	<b>22/32</b>
Specific Gravity @ 60°F	0.994
Density, lbs/gal @ 60°F	8.28
Color, ASTM D1500	4.0
Flash Point (COC), °C (°F)	266 (511)
Pour Point, °C (°F)	-60 (-76)
Viscosity	
cSt @ 40°C	25.5
cSt @ 100°C	5.1
SUS @ 100°F	132
SUS @ 210°F	43
Viscosity Index	132
Acid Number, SAE ARP 5088, mg KOH/g	0.18
Copper Corrosion, ASTM D130	1a
Foam Test, ASTM D892	
Sequence I, mL	5/0
Sequence II, mL	5/0
Sequence III, mL	10/0
Particle Contamination, NAS 1639, max	6
Rust Test, ASTM D665 A&B	Pass

## Health & Safety Information

For recommendations on safe handling and use of this product, please refer to the Safety Data Sheet via <http://www.phillips66.com/EN/products/Pages/MSDS.aspx>.