

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 under the unique conditions presented by aero-derivative 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:

- U.S. Military MIL-PRF-23699G, Class STD Synthetic Turbine Oil
- Siemens (formerly Allison, Indianapolis) STG A05 (501-k) engine line (all models)
- Rolls-Royce PLC / Siemens STG A20 (Avon), STG A30 & STG A35 (RB211), Olympus, Tyne & Spey industrial engines
- General Electric GEK 97310, LM500 to LM9000 industrial engines
- Solar Turbines ES9-224, Revision W, Class III (Synthesized Ester) 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





Syndustrial® Turbine Oil

Typical Properties		
ISO Grade		22/32
Specific Gravity @ 60°F	ASTM D4052	0.993
Density, lbs/gal @ 60°F	Calculated	8.28
Color	ASTM D1500	4.0
Flash Point (COC), °C (°F)	ASTM D92	269 (516)
Pour Point, °C (°F)	ASTM D97	-57 (-71)
Viscosity		
cSt @ 40°C	ACTM D445	25.0
cSt @ 100°C	ASTM D445	5.03
cSt @ -40°C		9171
Viscosity Index	ASTM D2270	132
Acid Number, mg KOH/g	SAE-ARP-5088	0.2
Copper Corrosion	ASTM D130	1a
Foam Test		
Sequence I, tendency/stability, mL	ACTAA DOOG	5/0
Sequence II, tendency/stability, mL	ASTM D892	5/0
Sequence III, tendency/stability, mL		10/0
Particle Contamination, NAS 1639, max	FED-STD-791-3012	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/SDS.