



TECH DATA

TURBOFLO™

TURBINE FLUIDS

INTRODUCTION

Petro-Canada Lubricants TURBOFLO™ turbine fluids are specifically designed to lubricate and cool steam and gas turbines and deliver excellent lubrication to bearings in demanding operations.

TURBOFLO turbine fluids demonstrate exceptional oxidative and thermal stability providing optimum turbine performance and reliability.

FEATURES AND BENEFITS

Exceptional resistance to fluid breakdown caused by air and high temperatures

Turbine Oil Oxidation Stability Test (TOST) result exceeds industry standards.

Rotating Pressure Vessel Oxidation Test (RPVOT) result achieves greater than **1,500 minutes**

- Significantly extends oil life particularly after a complete fluid change-out
- Lowers operating costs by extending intervals between oil top-ups or complete change-outs

Excellent water separability

- Drainage of condensed water from oil coalescers and purifiers is greatly facilitated; providing excellent rust and corrosion protection

Excellent air and gas separation

- Less fluid break down
- Improves equipment reliability
- Maintains a consistent lubrication film on components

APPLICATIONS

TURBOFLO turbine fluids are designed to exceed the demanding service requirements of steam and gas turbine operators in demanding operating conditions. They also provide extended, corrosion-free lubrication of bearings operating at temperatures above 260°C (500°F).

Steam and Gas Turbines

TURBOFLO turbine fluids are recommended for lubricating steam and gas turbines used for electric power generation and other industrial applications.

TURBOFLO turbine fluids deliver excellent performance over the entire life of the fluid. In large power generation plants, turbine oil is used for several years until degradation of the oil causes poor water separability and low oxidation resistance.

TURBOFLO 32 and 46 are approved for Ansaldo Energia AD00020487. TURBOFLO turbine fluids are suitable for use in steam and gas turbines requiring the following manufacturer and industry specifications:

DIN	DIN 51515 Part 1 & 2
ASTM	D4304 Type I & II
GB	GB 11120-2011 L-TSE, L-TGE, L-TSA and L-TGA
Siemens	TLV 9013 04(EP)
Siemens	TLV 9013 05(EP)
Alstom	HTGD 90117
GE	GEK 32568K
GE	GEK 46506E
Ansaldo Energia	TGO2-0171-E00000/J

TYPICAL PERFORMANCE DATA

Property	ASTM Test Method	TURBOFLO 32	TURBOFLO 46	TURBOFLO 68
Viscosity cSt @ 40 C cSt @ 100 C	D445	31.5 5.4	45.5 6.9	72.5 9.1
Viscosity Index	D2270	109	107	100
Flash Point, COC, °C / °F	D92	220/428	234/453	245/473
Pour Point, °C / °F	D5950	-42/-43	-39/-38	-36/-33
Acid Number, mg KOH/g	D664	<0.1	<0.1	<0.1
Water Separability 54°C	D1401	40 ml water (10 min)	40 ml water (10 min)	37 ml water (15 min)
Air Release at 50°C, minutes	D3427	2	3	5.5
Rotating Pressure Vessel Oxidation Test, minutes	D2272	1,500+	1,500+	1,500+
Turbine Oil Oxidation Stability Test, hours to AN of 2.0 mg KOH/g	D943	10,000+	10,000+	10,000+
Rust Procedure A & B, 24 h	D665	Pass	Pass	Pass
Copper Corrosion, 3h @ 100°C	D130	1a	1a	1a
FZG	D4998	≥10	≥10	≥10

The values quoted above are typical of normal production. They do not constitute a specification.

Note: TURBOFLO 46 (TFC46EP) is an EP formulation. Product blended prior to 2022 (TFC46) is a non-EP formulation.

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Committed to the disciplined operation of our business.



Petro-Canada Lubricants Inc.

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