

# ROYCO® 560

ADVANCED SYNTHETIC TURBINE ENGINE OIL

## **Description**

ROYCO TURBINE OIL 560 (aka ROYCO 560) has been developed for the increased demands of the latest technological developments in gas turbine engines. With the advent of higher bypass ratio engines, higher thrust output, and consequently higher engine operating temperatures and pressures, this fluid has demonstrated a remarkable savings in lower maintenance costs and down time. ROYCO 560 surpasses the performance of traditional Type II (Mil-PRF-23699 Class STD) fluids by combining higher thermal-oxidative stability with lower carbon residue formation. This results in better engine performance and longer periods between MOH. In addition, this third generation oil may be used in any older engine designed to run on Mil-PRF-23699 type fluids so that even these engines can realize the same performance benefits. Indeed, it has been demonstrated that third generation fluids can offer significant advantages over traditional oils in terms of lubricant life, engine cleanliness, and reduced emissions.

### **Applications**

**ROYCO 560** was specifically developed for use in high performance turboprop and turbojet engines operating at higher temperatures, as well as industrial gas turbine engines, where longer engine life and higher thermal stability are required. **ROYCO 560** is well suited for use in engines that require minimum sludge and coke deposition. **ROYCO 560** is also recommended for helicopter transmissions. This oil should only be used in applications where synthetic oils have been specified or in systems expressly designed for synthetic lubricants.

#### **Features and Benefits**

Features	Benefits	
Excellent Thermal and Oxidative Stability	Maintains engine efficiency; Extends engine life; Reduces carbon deposits and sludge formation.	
Low pour point	Eases start-up in low ambient temperatures.	
Excellent corrosion and wear protection	Extends component life; Reduces engine maintenance costs.	
Chemically stable	Lowers oil consumption and losses due to evaporation	

#### **Approvals and Specifications**

**ROYCO 560** has been approved for use in most aviation gas turbine engines requiring Mil-PRF-23699 approved fluids. In addition, **ROYCO 560** is approved for use in industrial gas turbines manufactured by the Solar Division of Caterpillar, General Electric, Pratt & Whitney, Allison, Rolls Royce, and most others. Specific engine approval information may be obtained on request. **ROYCO 560** is qualified to MIL-SPEC: MIL-PRF-23699F Class HTS.

www.anderol.com

PROPERTY	TEST METHOD	ROYCO® 560
Kinematic Viscosity, cSt	ASTM D445	-
@ 100°C		5.25
@ 40°C		26.7
@ -40°C		10,765
Flash Point, °C (°F)	ASTM D92	260 (500)
Pour Point, °C (°F)	ASTM D97	-58 (-73)
Neutralization No.	SAE-APR-5088	0.23
Evaporation, 400°F, 6.5 hours, % wt loss	ASTM D972B	3
Synthetic Rubber	FTM 3604	
Swell "H" (72 hrs, 158°F), %		16.9
Swell "F" (72 hrs, 400°F), %		13.8
Thermal Stability and Corrosivity (96 hrs, 525 °F)	FTM 3411	
Viscosity; @ 40°C, % Change		1.00
Acid Number Change, mg KOH/g		0.98
Metal Weight Change, mg/cm <sup>2</sup>		0.28
Oxidation and Corrosion Stability (72 hrs, 400 °F)	FTM 5308	
Iron, wt. change, mg/cm <sup>2</sup>		0.02
Silver, wt. change, mg/cm <sup>2</sup>		0.03
Aluminium, wt. change, mg/cm <sup>2</sup>		0.01
Magnesium, wt. change, mg/cm <sup>2</sup>		0.02
Copper, wt. change, mg/cm <sup>2</sup>		0.01
Viscosity Change @ 40°C, %		19.8
Acid Number Change		0.65
Contamination, mg/100 ml		0.9
Sediment, 1.2 micron filter, mg/L		1.9
Foaming, ml initial/ml final	ASTM D892	
Sequence I		17/0
Sequence II		9/0
Sequence III		15/0
Density, pounds per gallon		8.35

Packaging - ROYCO 560 is available in 55 gallon drums, 5 gallon pails, and 24 by 1-quart cans per carton.

The information contained herein relates to a specific Chemtura product and its use, and is based on information available as of the date hereof. Additional information relating to the product can be obtained from the pertinent Material Safety Data Sheets. Nothing in this Technical Data Sheet constitutes a term or condition of sale nor shall it take precedence over, supersede or modify or be construed to take precedence over, supersede or modify, any of Chemtura's standard or other terms and conditions of sale under which the product is sold by Chemtura. NOTHING IN THIS TECHNICAL DATA SHEET CONSTITUTES, NOR SHALL IT BE CONSTRUED TO CONSTITUTE, A REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, REGARDING THE PRODUCT'S CHARACTERISTICS, USE, QUALITY, SAFETY, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Nothing contained herein shall constitute permission or recommendation to practice any intellectual property without the permission of the owner. This product is sold only under terms and conditions agreed in writing by Chemtura and the respective buyer and the terms and conditions of such agreements shall in all cases prevail. ANDEROL, ROYCO, AOSyn and PQ and their corresponding logos are trademarks of Chemtura Corporation or one of its subsidiaries. Copyright (c) 2010 Chemtura Corporation. All rights reserved.



Anderol Specialty Lubricants a division of Chemtura Corporation 215 Merry Lane East Hanover, New Jersey 07936 Technical Service +1.973.887.7410 Customer Service +1.203.573.4595 Fax +1.203.573.2324 info-anderol@chemtura.com