

# Technical Data Sheet Eastman™ Turbo Oil 2380

### **Applications**

- Aerospace
- Aviation turbine oil (ato)

#### Key Attributes

- 5 cSt synthetic lubricant
- Balanced combination of Oxidative and Thermal stability
- Best low temperature characteristics

## **Product Description**

Eastman Turbo Oil 2380<sup>™</sup> is still one of the most widely used turbine oils in the commercial aviation industry. It was one of the first turbine oils to be qualified and approved for MIL-PRF-23699 STD (Standard) class and subsequently SAE AS5780 SPC (Standard Performance Capability) class.

If you're looking for exceptional accessory performance Turbo Oil 2380 delivers, with extended on-wing accessories lifespan and improved reliability. Turbo Oil 2380 has also been found to neutralize the effects of copper (Cu)—with superior metal passivation results showing reduced oxidation and sludge formation.

# **Typical Properties**

Property	Test Method	Typical Value, Units
General		
Density		
@ 15°C	ASTM D 1298	0.9749 kg/L
Viscosity, Kinematic		
@ 100°C	ASTM D 445	4.97 mm <sup>2</sup> /s
@ 40°C	ASTM D 445	24.2 mm <sup>2</sup> /s
@ -40°C after 35 minutes	ASTM D 2532	7,950 mm <sup>2</sup> /s
Pour Point	ASTM D 97	-57 °C
Flash Point	ASTM D92	265 °C
Total Acid Number	SAE ARP5088	0.43 mg KOH/g
Evaporation Loss		
6.5 hrs @ 204°C	ASTM D 972	3.0 %
Foaming Volume		
Sequence 1 @ 24°C	ASTM D 892	9/0 ml/vol
Sequence 2 @ 93 °C	ASTM D 892	8/0 ml/vol
Sequence 3 @ 24°C	ASTM D 892	8/0 ml/vol
Load Carrying Ability <sup>a</sup>		
2000 rpm	IP 166	99 %
6000 rpm	IP 166	86 %
Rubber Swell		
Nitrile Rubber (192 hrs @	DERD Test, Method 4	10.5 %
130°C)		
Silicone Rubber (192 hrs @	DERD Test, Method 4	10.5 %
175°C)		14.0/
Viton LCS Rubber (192 hrs @	DERD Test, Method 4	14 %
200°C)		22.5 %
Viton Rubber (192 hrs @ 200°C)	DERD Test, Method 4	22.3 %

<sup>a</sup>IAE Gear Machine, Ref Oil A



## Comments

Properties reported here are typical of average lots. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given.

Eastman and its marketing affiliates shall not be responsible for the use of this information, or of any product, method, or apparatus mentioned, and you must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and for the health and safety of your employees and purchasers of your products. No warranty is made of the merchantability of fitness of any product, and nothing herein waives any of the Seller's conditions of sale.

8/28/2018 3:23:47 PM

© 2021 Eastman Chemical Company or its subsidiaries. All rights reserved. As used herein, ® denotes registered trademark status in the U.S. only.