

## **EASTMAN**

# **Technical Data Sheet Eastman™ Turbo Oil 2197**

#### **Application/Uses**

- Aviation
- Engine Accessories
- Engines

#### **Key Attributes**

- 5 cSt High Thermal Stability synthetic lubricant
- High temperature cleanliness
- Outstanding Oxidative, Thermal and Hydrolytic stability

### **Product Description**

Eastman™ Turbo Oil 2197 is designed to exceed the demands of current and future jet engines. With over 300 million hours of in-flight experience, it is by far the most widely used HTS fleet oil in the world. Eastman™ Turbo Oil 2197 is manufactured in our own facility so you can rely on consistently high quality wherever you are in the world.

Eastman™ Turbo Oil 2197 is AS5780 HPC / MIL-PRF-23699 HTS class, 5 cSt turbine oil for the most thermally demanding engine and accessory applications.

#### **Typical Properties**

Property	Test Method	Typical Value, Units
Density @ 15°C	ASTM D 1298	0.9968 kg/L
Viscosity, Kinematic		
@ 100°C	ASTM D 445	5.28 mm <sup>2</sup> /s
@ 40°C	ASTM D 445	26.98 mm <sup>2</sup> /s
@ -40°C after 35 minutes	ASTM D 2532	12,539 mm <sup>2</sup> /s
Pour Point	ASTM D 97	-57°C
Flash Point	ASTM D 92	262°C
Total Acid Number	SAE ARP5088	0.36 mg KOH/g
Evaporation Loss 6.5 hrs @ 204°C	ASTM D 972	2.30%
Foaming Volume <sup>a</sup>		
Sequence 1 @ 24°C	ASTM D 892	10/0 ml/vol
Sequence 2 @ 93 °C	ASTM D 892	10/0 ml/vol
Sequence 3 @ 24°C	ASTM D 892	10/0 ml/vol
Thermal Stability & Corrosivity <b>b</b>		
Viscosity	FED-STD-791, 3411	0.37
Total Acid Number	FED-STD-791, 3411	1.08 mg KOH/g
Metal Weight	FED-STD-791, 3411	-0.154 mg/cm <sup>2</sup>

Viscosity @ 40°C	FED-STD-791, 14.75% 5308
Total Acid Number	FED-STD-791, 0.96 mg KOH/g 5308
Steel Weight Change	FED-STD-791, 0.011 mg/cm <sup>2</sup> 5308
Silver Weight Change	FED-STD-791, -0.017 mg/cm <sup>2</sup> 5308
Aluminium Weight Change	FED-STD-791, 0.009 mg/cm <sup>2</sup> 5308
Magnesium Weight Change	FED-STD-791, -0.012 mg/cm <sup>2</sup> 5308
Copper Weight Change	FED-STD-791, -0.076 mg/cm <sup>2</sup> 5308
Sludge	FED-STD-791, 0.37 mg/100ml 5308
Sediment	
Visual Undissolved Water	FED-STD-791, None 3010
Sediment, 1.2 µm filter	FED-STD-791, 0.85 mg/L 3010
Metal Weight	FED-STD-791, 0.12 mg/cm <sup>2</sup> 3010

a @ 1 minute setting

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**b** @ 274°C

**c** 72 hrs @ 204°C