

Product Data

BP Turbo Oil 2197 High Performance Capability Oil

Description

- BP Turbo Oil 2197 is a latest generation 5 cSt High Thermal Stability (HTS) synthetic lubricant that is approved against US military specification MIL-PRF-23699 HTS.
- It is formulated to provide exceptional high temperature cleanliness in vapor mist and liquid film areas, as well as outstanding oxidative, thermal and hydrolytic stability. It provides exceptional performance in the most demanding existing turbines as well as new generation turbines just entering service.

Application

BP Turbo Oil 2197 is our newest turbo oil, designed to be a “fleet-wide” oil especially suitable for hot aircraft and aeroderived engines.

BP Turbo Oil 2197 has been approved by a wide range of engine and accessory manufacturers for their applicable equipment, including:

Rolls-Royce, GE, Pratt & Whitney, Pratt & Whitney Canada, Pratt & Whitney Aero Power APUs (formally Hamilton Sundstrand), United Technologies Aerospace Systems (formally Hamilton Sundstrand), Honeywell, CFMI, IAE, MTU and Turbomeca.

Please contact our local representatives shown in the Eastman Aviation Solutions website for approval details.

Advantages

- BP Turbo Oil 2197 entered commercial airline service in mid-1995 and has already accumulated over 200 million hours of successful experience in more than 20,000 units of popular engine and accessory models.
- The benefits operators can expect from this oil include excellent Thermal and Oxidation Stability, outstanding high temperature cleanliness and Superior Hydrolytic Stability.
- Users of this oil have been enjoying cleaner engines, i.e., less or no carbon deposits in oil supply and scavenge tubes or bearing compartments and some of them also experience less frequent oil filter replacement.

Storage

- The shelf life of BP Turbo Oil 2197 can extend beyond ten years when stored in original, unopened quart cans under recommended storage conditions, i.e. in a well ventilated and covered area away from extreme heat and moisture etc. 55-gallon drums and 5-gallon pails have an expected shelf life of three years minimum.
- For all package styles, shelf life can be increased significantly beyond those stated above, depending upon storage conditions.

Please contact your Eastman representative if you have any questions about product usability.

Typical Characteristics

Name	Method	Units	BP Turbo Oil 2197
Density @ 15°C	ASTM D1298	Kg/l	0.9968
Kinematic Viscosity @ 100°C	ASTM D445	mm ² /s	5.28
Kinematic Viscosity @ 40°C	ASTM D445	mm ² /s	26.98
Kinematic Viscosity @ -40°C after 35 minutes	ASTM D2532	mm ² /s	12,539
Pour Point	ASTM D97	°C	-57
Flash Point	ASTM D92	°C	262
Total Acid Number	SAE ARP5088	mgKOH/g	0.36
Evaporation Loss (6.5 hrs @ 204°C)	ASTM D972	%	2.30
Foaming Volume @ 1 min setting			
Sequence 1 @ 24°C	ASTM D892	ml/vol	10/0
Sequence 2 @ 93 °C	ASTM D892		10/0
Sequence 3 @ 24°C	ASTM D892		10/0
Thermal Stability & Corrosivity @ 274°C			
Viscosity	FED-STD-791, 3411		0.37
Total Acid Number		mgKOH/g	1.08
metal Weight		mg/cm ²	-0.154
Corrosion & Oxidative stability (72 hrs @ 204°C)			
Viscosity, 40°C	FED-STD-791, 5308	%	14.75
Total Acid Number		mgKOH/g	0.96
Steel Weight Change		mg/cm ²	0.011
Silver Weight Change		mg/cm ²	-0.017
Aluminium Weight Change		mg/cm ²	0.009
Magnesium Weight Change		mg/cm ²	-0.012
Copper Weight Change		mg/cm ²	-0.076
Sludge		mg/100ml	0.37
Sediment			
Visual Undissolved Water	FED-STD-791, 3010	-	None
Sediment, 1.2 µm filter		mg/l	0.85
Metal Weight		mg/cm ²	0.12

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For the sales or technical contact nearest you, please visit the BP Turbo Oil page on www.EastmanAviationSolutions.com or send an email to TurboOil@eastman.com.