



Product Data

BP Turbo Oil 2389

Advanced APU Oil

Description

- BP Turbo Oil 2389 is a 3 cSt synthetic lubricant.
- BP Turbo Oil 2389 is approved against US military specification MIL-PRF-7808 grade 3 and incorporates a level of technology from Type II (5 cSt) commercial turbine lubricants.

Application

- This lubricant combines the thermal and oxidation stability of our commercial 5 cSt synthetic lubricant, BP Turbo Oil 2380, with the ability to flow at extremely low environmental temperature. In addition, it has gear-carrying ability equal to or better than other approved MILPRF-7808 Grade 3 oils.
- BP Turbo Oil 2389 thus affords the military operator the lower viscosity advantage of MIL-PRF-7808 Grade 3 oils while providing the higher quality advantages of the Type II commercial oils, especially with respect to better thermal and oxidation stability.
- BP Turbo Oil 2389 has a wide range of APU applications.

BP Turbo Oil 2389 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 (formerly Hamilton Sundstrand) United Technologies Aerospace Systems (formerly Hamilton), Honeywell, CFMI, MTU and Turbomeca.

Please contact our local representatives shown in the Air BP website for approval details.

Advantages

- A major advantage of BP Turbo Oil 2389 is its ability to limit the formation of vapor phase deposits.
- BP Turbo Oil 2389 provides load carrying ability well in excess of requirements established by the engine and accessory manufacturers.
- The superior low temperature viscosity of BP Turbo Oil 2389 makes it a better product for low temperature application. Many APU operators prefer to use 3 cSt oil, such as BP Turbo Oil 2389 for lubrication in order to improve its cold start reliability.

Typical Characteristics

Name	Method	Units	BP Turbo Oil 2389
Density @ 15°C	ASTM D1298	Kg/l	0.9511
Kinematic Viscosity @ 100°C	ASTM D445	mm²/s	3.19
Kinematic Viscosity @ 40°C	ASTM D445	mm²/s	12.46
Kinematic Viscosity @ -51°C after 3 hours	ASTM D2532	mm²/s	7,800
Pour Point	ASTM D97	°C	-60
Flash Point	ASTM D92	°C	220
Deposition Test, avg. deposition rating	FED Test Method STD.NO.791, 5003	mgKOH/g	0.59
Acid Number Change		% Change	11.2
Viscosity @ 40°C		ml	96
Oil Consumption			100
Evaporation Loss (6.5 hrs @ 205°C)	ASTM D972	%	20.0
Foaming Characteristics (dynamic). Foam Volume			
80°C @ 1000 cc/min	FED. Test Method STD.NO.791, 3214	ml/collapse time (sec)	15/8
80°C @ 1500 cc/min			45/8
80°C @ 2000 cc/min			105/15
110°C @ 1000 cc/min			20/8
110°C @ 1500 cc/min			55/8
110°C @ 2000 cc/min			170/18
Corrosion & Oxidative Stability (96 hrs @ 200°C)			
Aluminium Weight Change	FED. Test Method STD.NO.791, 5307	mg/cm²	0.00
Silver Weight Change		mg/cm²	-0.02
Bronze Weight Change		mg/cm²	0.04
Iron Weight Change		mg/cm²	0.02
M-50 Weght Change		mg/cm²	-0.02
Magnesium Weight Change		mg/cm²	-0.02
Titanium Weight Change		mg/cm²	0.00
Viscosity Change @ 40°C		%	9.5
Neut. no		Change	0.96

Storage

- The shelf life of BP Turbo Oil 2389 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 Air BP representative if you have any questions about product usability.

BP Turbo Oil 2389

03 Jul 2014

BP, the BP logo and related marks are trademarks of BP p.l.c., used under licence.

BP, the BP logo and related marks are trademarks of BP p.l.c., used under licence. This data sheet and the information it contains is believed to be accurate as of the date of printing. However, no warranty or representation, express or implied, is made as to its accuracy or completeness. Data provided is based on standard tests under laboratory conditions and is given as a guide only. Users are advised to ensure that they refer to the latest version of this data sheet. It is the responsibility of the user to evaluate and use products safely, to assess suitability for the intended application and to comply with all applicable laws and regulations. Material Safety Data Sheets are available for all our products and should be consulted for appropriate information regarding storage, safe handling, and disposal of the product. No responsibility is taken by either BP plc or its subsidiaries for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from hazards inherent in the nature of the material. All products, services and information supplied are provided under our standard conditions of sale. You should consult our local representative if you require any further information.

Air BP Lubricants/BP Lubricants USA Inc., 1500 Valley Road, Wayne, NJ 07470, USA
+1 973 633 2200
www.airbp.com/lubricants

