



AeroShell[®] TURBINE OIL 500

Synthetic turbine engine oil

Product Description

AeroShell Turbine Oil 500 is a 5 centistoke synthetic lubricating oil for gas turbine engines. It is a careful blend of “hindered” esters and modern additive technology. **AeroShell Turbine Oil 500** provides superior high temperature corrosion protection and excellent anti-wear protection. It is blended to have superior thermal and oxidation performance in critical turbine applications. **AeroShell Turbine Oil 500** meets all the requirements and is qualified under US Military specification MIL-PRF-23699F Class STD. It is also approved commercially for use in a wide range of turbine engines as well as the majority of accessories. Always check with the manufacturer for the exact recommendation for each application.

Applications

- Jet aircraft turbine engines
- Helicopter turbine engines
- Helicopter gear boxes and transmissions
- Industrial gas turbine engines

Features/Benefits

- Provides superior high temperature corrosion protection
- Excellent load carrying capabilities
- Premium thermal and oxidation performance

Approvals

- MIL-PRF-23699F Classification STD
- DEF STAN 91-101 Grade OX-27
- Allison – EMS-53, 250 Series, 501 D13, T56, GMA 2100, GMA 3007
- General Electric – D-50 TF 1, GE90, CF6, CT58, CF700, CJ610, CJ805, CF34, CT7, CT64
- Pratt & Whitney – 521C Type II, JT3, JT4, JT8, JT9, PW4000, JT12, JT15, PT6A, PT6T, ST6, PW100, PW200
- Rolls-Royce – RB211-22B, -524, -535, Trent, Tay, Gnome, Spey, RB183, Adour, M45H, Viper (Series MK 301, 521, 522, 526, 535, 540, 601, 623 and 632)
- Textron Lycoming – ALF 502, ALF 507, LTS 101, LTP 101, T53, T55, AL5512
- Turbomeca – Arrouste, Larzac, Makila, Arriel, RTM322, TM391, TM333

Typical Properties of AeroShell Oil Turbine 500

Product Code	60072	
Property	Requirements	Typicals
Oil Type	Synthetic ester	Synthetic ester
Viscosity		
@ 100 °C, cSt	4.9-5.4	5.4
@ 37.8 °C, cSt	25 min	25.26
@ -40.0 °C, cSt	13,000 max	8,996
Flash Point, °C	246 min	256
Pour Point, °C	-54 max	-75
Total Acidity – Mg KOH/g	1 max	0.01
Evaporation Loss 6.5 hrs @ 204°C, %m	10.0 max	2.52
Foaming	Must pass	Pass
Swelling of Standard Synthetic Rubber SAE-AMS 3217/1 72 hrs @ 70 °C swell-%	5 to 25	Within Limits
SAE-AMS 3217/4, 72 hrs @ 204 °C swell-%	5 to 25	Within Limits
Standard Silicone Rubber 96 hrs @ 121 °C swell-%	5 to 25	Within Limits
Terminal Stability/Corrosivity 90 hrs @ 274 °C		
Metal weight change –mg/cm ²	4 max	0.5
Viscosity change - %	5 max	2.69
Total Acid Number Change – mg KOH/g	6 max	2.03
Corrosion and Oxidation Stability		
72 hrs @ 175 °C	Must pass	Pass
72 hrs @ 204 °C	Must pass	Pass
72 hrs @ 218 °C	Must pass	Pass
Ryder Gear Test, Relative Rating- Hercolube A	102 min	117
Bearing Test Rig Type 1 1/2 Conditions		
Overall deposit demerit rating	80 max	47
Viscosity changer @ 37.8 °C -%	-5 to +30	19
Total Acid Number Change-mg KOH/g	2 max	1.1
Filter Deposits - g	3 max	0.4
Sonic shear stability		
Viscosity Change @ 40 °C-%	4 max	Nil
Trace Metal Content	Must pass	Pass
Sediment – mg/1	10 max	2.6
Ash – mg 1	1 max	0.05

Handling & Safety Information

For information on the safe handling and use of this product, refer to its Material Safety Data Sheet at <http://www.equivashellmsds.com>. For more information and availability, call **1+800-782-7852** or visit the World Wide Web: <http://www.shell-lubricants.com/>.