

SYNTHETIC AVIATION TURBINE OIL

NATO CODE O-156

DESCRIPTION

TURBONYCOIL 600 is a lubricating oil with a viscosity of 5 cSt at 100°C. It is based on high thermal stable neopentyl polyol esters, fortified with carefully selected anti-oxidant, anti-wear and anti-corrosion additives.

TURBONYCOIL 600 features a much lower volatility at high temperature and a higher flash point than oils from competition. It possesses excellent resistance to foaming and demonstrates superior lubricity.



APPLICATIONS

- Turbines and accessories (APU, starter, IDG, etc.) of military and commercial aircraft and helicopters
- Ground gas turbines including off-shore installations (AGT)

TURBONYCOIL 600 is designed for use in gas turbine engines in military and civil aircrafts as well as in stationary industrial applications.

TURBONYCOIL 600 is approved by all major engine manufacturers for use in most of military and civil engines, APUs, IDGs and propellers: Aviadvigatel, CFM International, Collins Aerospace, General Electric, Honeywell, International Aero, Klimov, Motor Sich, Pratt and Whitney, Rolls-Royce, Safran Aircraft Engines, Safran Helicopter Engines, etc.

TURBONYCOIL 600 has logged over 60 million hours of operation since 1985.

SPECIFICATIONS * / OEM's & Airframers reference

- | | |
|--|--------------------------------------|
| • Approved MIL-PRF-23699 G CLASS STD | • Listed in Bombardier CML 03-009G |
| • Approved DCSEA 299/A | • Listed in Bombardier CML 03-012G |
| • Approved DEF STAN 91-101 Iss.3 / OX-27 / OX-28 | • Listed in Bombardier CML 03-015L |
| • Approved SAE AS5780 CLASS SPC | • Listed in Bombardier CML 03-016B |
| • Listed in AIRBUS CML 03ABA1 | • Listed in Boeing CML D00068 |
| • Listed in ATR CML 03-002 | • Listed in Boeing CML D00523 |
| • Listed in ATR CML 03-008H | • Listed in Airbus Helicopters CM103 |
| • Listed in Bombardier CML 03-001F | |

* **Approved:** The product has been approved by the relevant authority. The product is referenced on the applicable qualified product list.

AERODERIVATIVE GAS TURBINE (AGT) Qualifications

- General Electric: LM500, LM1500, LM1600, LM2500, LM2500+, LM5000, LM6000, LMS100
- Siemens Energy: SGT-A05 (Industrial 501-K), SGT-A20 (Industrial Avon), SGT-A35 (Industrial RB211-GT30)
- Rolls-Royce: Olympus, Tyne, Spey
- Pratt & Withney Canada: ST6 series
- Aviadvigatel: PS-90

CHARACTERISTIC	UNIT	TYPICAL RESULT	LIMIT *	TEST METHOD
Kinematic viscosity at 100°C 40°C - 40°C	mm²/s	5.09 25.4 9609	4.90 - 5.40 min. 23.0 max. 13000	ASTM D445
Density @ 20°C	kg/dm³	0.992	-	ASTM D4052
Stability 72 h at - 40°C, viscosity change	%	0.6	max. +/- 6	ASTM D2532
Flash point, COC	°C	275	min. 246	ASTM D92
Pour point	°C	- 60	max. - 54	ASTM D97
Acid number	mg KOH/g	0.22	max. 1.00	SAE-ARP-5088
Particles contamination according to NAS 1638	Class	5	max. 6	FED-STD-791-3012
Evaporation loss 6 h 30 at 204°C	%w	2.7	max. 10.0	ASTM D972
Foaming characteristics Foam volume at 24°C after 5 minutes aeration after 1 minute settling at 94°C after 5 minutes aeration after 1 minute settling at 24°C after 94°C after 5 minutes aeration after 1 minute settling	ml	10 0 5 0 10 0	max. 25 0 max. 25 0 max. 25 0	ASTM D892
Thermal stability and corrosivity 96 h at 274°C Viscosity change at 40°C Acid number change Steel weight change	% mg KOH/g mg/cm²	0.5 2.5 0.2	max. +/- 5.0 max. 6.0 max. +/- 4.0	FED-STD-791-3411
Sediments, filtered through 1.2 micron	mg/dm³	0.3	max. 10.0	FED-STD-791-3010
Corrosion and oxidative stability 72 h at 204°C Acid number change Viscosity change at 40°C Steel weight change Silver weight change Aluminium weight change Magnesium weight change Copper weight change Sludge content through 10 microns	mg KOH/g % mg/cm² mg/cm² mg/cm² mg/cm² mg/cm² mg/cm² mg/100 cm³	1.20 16.8 0.0 0.0 0.0 0.0 0.0 0.0 0.7	max. 3.00 - 5.0 to + 25.0 max. +/- 0.2 max. +/- 0.2 max. +/- 0.2 max. +/- 0.2 max. +/- 0.4 max. 50.0	FED-STD-791-5308
HLPS dynamic coking at 375°C – 20 h	mg	0.6	max. 4.0	SAE-ARP5996

* MIL-PRF-23699 G CLASS STD, SAE AS5780 CLASS SPC



The values above are typical values. They do not constitute any contractual commitment.

Sales specifications are available on request. The present technical data sheet replaces all the previous editions.