



SYNTHETIC AVIATION TURBINE OIL

NATO CODE O-160 – DEF STAN 91-100 Iss.3 – OX-26
Analog B-3V (TU38 101295-85)

DESCRIPTION

Turbonycoil 699 is a lubricating oil with a viscosity of 5 cSt at 100°C. It is based on polyol esters with high thermal stability, fortified with selected additives. It exhibits a much improved anti-wear performance over turbine oils of same viscosity (5 cSt – MIL-PRF-23699 Class STD).



APPLICATION

Turbonycoil 699 is designed for use in gas turbine engines in military and civil aircrafts as well as in stationary industrial applications.

Turbonycoil 699 is best used in jet engines that require a very high load-carrying capacity to reduce wear of highly loaded components (gearbox, bearings).

Turbonycoil 699 is recommended for helicopter gearboxes that are exposed to both high loads and high temperature for long period of time and is a substitute of the Russian oil B-3V (TU 38 101295-85).

Turbonycoil 699 has been used since 1996 on the RB199 engine of Panavia Tornado multi-role fighter.

Characteristic	Unit	Typical Result	DEF STAN 91-100 Limit	Test method
- Density at 15°C	kg/dm ³	0.994	report	ASTM D 4052
- Kinematic viscosity				
At 100°C		5.1	4.90 - 5.40	
At 40°C	mm ² /s	25.6	max. 30.0	ASTM D 445
At - 40°C		10000	max. 13000	
- Flash point, COC	°C	265	min. 210	ASTM D 92
- Pour point	°C	- 57	max. - 54	ASTM D 97
- Acid number of the base stock of the fully formulated oil	mg KOH/g	0.01 0.55	max. 0.1 report	ASTM D 664
- Foaming test (tendency 5min aeration / stability 1 min settling)				
at 24°C	ml/ml	5/0	max. 25 / 0	
at 94°C		5/0	max. 25 / 0	ASTM D 892
at 24°C after 94°C		5/0	max. 25 / 0	
- High temperature oxidative Stability, 25 h at 220°C				DEF STAN 05-50-Part 61 method 9
Acid number change	mg KOH/g	0.0	max. 1.5	
- Metal content				
Aluminium		0.0	max. 2	
Chromium		0.0	max. 2	
Copper		0.0	max. 2	
Iron		0.0	max. 2	
Lead		0.0	max. 2	
Magnesium	mg/kg	0.0	max. 2	Induction Coupled Plasma
Nickel		0.0	max. 2	
Silver		0.0	max. 2	
Titanium		0.0	max. 2	
Silicium		1.0	max. 4	

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.

