



SYNTHETIC AVIATION TURBINE OIL

NATO CODE O-150 - AIR 3514/A

DESCRIPTION

Turbonycoil 13 B is a lubricating oil with a viscosity of 3 cSt at 100°C. It is based on a synthetic ester and contains anti-oxidant, anti-wear and anti-corrosion additives.

APPLICATIONS

- Turbine oil (power plant, APU, starter, IDG, etc.) for aircraft and helicopter



Turbonycoil 13 B has been specially developed to lubricate aircraft turbine engines equipped with a total loss lubrication system such as SNECMA ATAR, fitted on Dassault Mirage III, IV, F1 and 5 ; Super Etendard.

It is also approved for use on SNECMA M53 engine (Dassault Mirage 2000 series) and many Turbomeca engines (Artouste II and III ; Astazou II ; IV M ; XIV ; XVI, Makila, Arriel, Turmo IV, TM 319 and TM 333). These engines power a large number of civil and military helicopters.

CHARACTERISTIC	UNIT	TYPICAL RESULT	AIR 3514/A LIMIT	TEST METHOD
Appearance	-	conform	bright limpid liquid	visual examination
Density at 20°C	kg/dm ³	0.942	report	ASTM D4052
Kinematic viscosity at 100°C 40°C - 54°C	mm ² /s	3.29 12.8 12700	min. 3 report max. 17000	ASTM D445
Flash point	°C	222	mini. 210	ASTM D92
Foaming characteristics at 80°C volume after 5 minutes aeration time for total foam collapse	cm ³ s	20 5	max. 100 max. 60	FTM-S-791-3213
Evaporation loss, 6 h 30 at 204°C	%w	26	max. 30	ASTM D972
Acid number	mg KOH/g	0.02	max. 0.30	ASTM D664
Lead corrosion, 1 h at 163°C	mg/cm ²	- 0.04	max. +/- 1	FTM-S-791-5321
Water content	mg/kg	300	max. 500	ASTM D1533
Brass and silver corrosion, 50 h at 232°C				
Brass	mg/cm ²	0.01	max. +/- 0.20	FTM-S-791-5305
Silver	mg/cm ²	0.00	max. +/- 0.20	

CHARACTERISTIC	UNIT	TYPICAL RESULT	AIR 3514/A LIMIT	TEST METHOD
Oxidation & Corrosion stability, 96 h at 175°C Viscosity change at 40°C Acid number change Sediment content Weight change Copper Steel Aluminium Magnesium Silver	% mg KOH/g mg/100 cm ³ mg/cm ²	+ 8.7 1.3 2.5 - 0.1 0.0 0.0 0.0 0.0	- 5 to + 15 max. 2.0 max. 10 max. +/- 0.4 max. +/- 0.2 max. +/- 0.2 max. +/- 0.2 max. +/- 0.2	FTM-S-791-5308
Elastomer compatibility, HNBR, after 168 h at 70°C	%v	+ 23.2	+ 12 to + 35	FTM-S-791-3604
Trace metal content Ag, Al, Cr, Cu, Fe, Mg, Mo, Ni, Pb, Si, Sn, Ti	mg/kg	0	max. 2	ASTM D5185 (Induction Coupled Plasma Spectrometry)

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.