



## AIRCRAFT TURBINE ENGINE PRESERVATIVE OIL

NATO CODE C-638 - MIL-PRF-8188 D

### DESCRIPTION

Nycoprotec 8188 is a 3 cSt oil at 100°C and is made of neopolyol esters, anti-oxidant, anti-wear and corrosion inhibitors.

### APPLICATIONS

Nycoprotec 8188 is designed to provide protection against corrosion in gas turbine engine lubrication system during storage.

Due to its chemical nature and characteristics very close from that of turbine oils, it is not required to flush the lubrication system prior to filling with the turbine oil for the operation of the gas turbine.

It is compatible with turbine oils complying with MIL-PRF-7808, MIL-PRF-23699 and DoD-PRF-85734 specifications.



CHARACTERISTIC	UNIT	TYPICAL RESULT	MIL-PRF-8188 D LIMIT	TEST METHOD
Appearance	-	conform	limpid	visual examination
Density at 20°C	kg/dm <sup>3</sup>	0.961	report	ASTM D4052
Kinematic viscosity at 100°C	mm <sup>2</sup> /s	3.4	min. 3.25	ASTM D445
at 40°C		13.9	min. 11.5	ASTM D2532
at - 51°C after 35 min. after 3 h		12120	max. 17000	
Acid number	mg KOH/g	0.33	max. 0.50	ASTM D664
Flash point	°C	226	min. 210	ASTM D92
Evaporation loss, 6 h 30 at 205°C	%w	10	max. 30	ASTM D972
Static foam test				
Foam volume	cm <sup>3</sup>	70	max. 100	FTM-S-791-3213
Collapse time	s	30	max. 60	
Humidity Cabinet	h	pass	mini. 144 h	ASTM D1748
Lead corrosion, 1 h at 163°C	g/m <sup>2</sup>	- 11	max. +/- 40	FTM-S-791-5321
Oxidation and corrosiveness test 48 h at 200°C				
Acid number increase	mg KOH/g	0.8	max. 4.0	ASTM D4636
Viscosity change (at 40°C)	%	+ 11	- 5 to + 25	
Corrosion, metal weight change	mg/cm <sup>2</sup>			
Aluminium		0.0	max. +/- 0.2	
Silver		0.0	max. +/- 0.2	
Steel M/50		0.0	max. +/- 0.2	
Iron		0.0	max. +/- 0.2	
Titanium		0.0	max. +/- 0.2	
Brass		- 0.1	max. +/- 0.4	
Magnesium		0.0	max. +/- 0.4	

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.