



## INSTRUMENT PETROLEUM LUBRICATING OIL

**OM-12 – O-142 – MIL-PRF-7870 C – DEF STAN 91-47 Iss.1**

### Description

Nycolube 7870 is a petroleum lubricating oil with a viscosity of 9.5 cSt at 40°C. It is inhibited against oxidation and corrosion.

### Application

Nycolube 7870 is a general purpose lubricating oil for aircraft parts and is primarily used as for aircraft instruments and electronic equipments (automatic pilot). It does provide a good protection against corrosion.

Nycolube 7870 is also used for general lubrication of moving aircraft parts (pins, locks, etc...) as it remains fluid at low temperature and does not impair the operation of flight controls at cruising altitude.



Characteristic	Unit	Result	Limit	Test method
- Appearance	-	conform	limpid homogeneous	visual examination
- Kinematic viscosity at 40°C -40°C	mm <sup>2</sup> /s	9.4 3320	mini. 9.0 max. 4000	ASTM D445
- Pour point	°C	< -61	max. -57	ASTM D97
- Flash point , COC	°C	136	min. 130	ASTM D92
- Acid number	mg KOH/g	0.05	report	ASTM D974
- Copper Corrosion 3 h at 100°C	-	1a	max. 1	ASTM D130
- Precipitation number	cm <sup>3</sup> /100 cm <sup>3</sup>	0.0	0.0	ASTM D91
- Stability at low temperature	-	pass	MIL-PRF-7870	MIL-PRF-7870
- Corrosion and oxidative stability 168 h at 121°C Change after test				
a. Total acid number	mg KOH/g	0.17	max. 0.2	DEF STAN 91-47
b. Viscosity at 40°C	%	2.5	-5 to +20	
c. Metal weight change				
cadmium	mg/cm <sup>2</sup>	0.0	max. +/- 0.2	
copper	mg/cm <sup>2</sup>	0.0	max. +/- 0.2	
steel	mg/cm <sup>2</sup>	0.0	max. +/- 0.2	
aluminium	mg/cm <sup>2</sup>	0.0	max. +/- 0.2	
magnesium	mg/cm <sup>2</sup>	0.0	max. +/- 0.2	
d. Aspect				
cadmium	-	conform	DEF-STAN	
copper	-	3a	max. 3	

\* Specification MIL-PRF-7870

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.