



SYNTHETIC DIELECTRIC COOLANT FLUID
NATO CODE S-1748 – MIL-PRF-87252 C

DESCRIPTION

Nycodiel is a synthetic hydrocarbon-based fluid, with a viscosity of 5 cSt at 40°C. It is inhibited against oxidation.

APPLICATION

Nycodiel is a new generation coolant for electronic systems, mainly military radar, embarked on aircraft, ships or ground equipment. It does replace advantageously former coolants based on silicate esters. Nycodiel is not sensitive to water and does exhibit a stable flash point during use and does not produce gels which clog cooling systems and filters.

Because of these features, the use of Nycodiel enables to reduce considerably the maintenance costs of radar.



Nycodiel is supplied with a controlled dielectric strength and particle contamination level.

Characteristic	Unit	Typical Result	MIL-PRF-87252 C Limit	Test method
- Appearance	-	conform	limpid homogeneous	visual examination
- Density at 20°C	kg/dm ³	0.795	report	ASTM D 4052
- Kinematic viscosity				
At 100°C		1.70	min. 1.65	ASTM D 445
At 40°C	mm ² /s	5.11	min. 5.0	
At - 40°C		260	max. 300	
At - 54°C		1067	max. 1300	
- Flash point, COC	°C	161	min. 150	ASTM D92
- Fire point	°C	176	min. 160	ASTM D92
- Total acid number	mg KOH/g	0.02	max. 0.2	ASTM D 664
- Water content	mg/kg	21	max. 50	ASTM D 1533
- Dielectric strength	kV	60	min. 35	ASTM D 877
- Resistivity at 25°C	Ohm-cm	1.2 x 10 ¹¹	min. 1x10 ¹⁰	ASTM D1169
- Corrosion and oxidative stability 168 h at 121°C				
Acid number change	mg KOH/g	0.05	max. 0.50	ASTM D 4636
Viscosity change at 40°C	%	1.0	- 5.0 to + 5.0	
Steel weight change	mg/cm ²	0.0	max. +/- 0.2	
Silver weight change	mg/cm ²	0.0	max. +/- 0.2	
Aluminium weight change	mg/cm ²	0.0	max. +/- 0.2	
Magnesium weight change	mg/cm ²	0.0	max. +/- 0.2	
Copper weight change	mg/cm ²	0.0	max. +/- 0.4	
- Solid particle content				
5 - 15 µm		1740	max. 10000	HIAC automatic counter
16 - 25 µm	nb/100 cm ³	178	max. 1000	
26 - 50 µm		41	max. 150	
51 - 100 µm		6	max. 20	
> 100 µm		1	max. 5	

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.

