



SYNTHETIC DIELECTRIC COOLANT FLUID

NATO CODE S-1748 - MIL-PRF-87252 E

DESCRIPTION

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

APPLICATIONS

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 E LIMIT	TEST METHOD
Appearance	-	conform	limpid homogeneous	visual examination
Density at 20°C	kg/dm ³	0.795	report	ASTM D4052
Kinematic viscosity				
at 100°C		1.70	min. 1.65	
at 40°C	mm ² /s	5.11	min. 5.0	ASTM D445
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 D664
Water content	mg/kg	20	max. 50	ASTM D1533
Dielectric strength	kV	60	min. 35	ASTM D877
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	
Viscosity change at 40°C	%	1.0	- 5.0 to + 5.0	
Steel weight change	mg/cm ²	0.0	max. +/- 0.2	ASTM D4636
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		1700	max. 8000	HIAC automatic counter
16 - 25 µm		200	max. 1425	
26 - 50 µm	nb/100 cm ³	50	max. 253	FED-STD-S-791-3012
51 - 100 µm		6	max. 45	
> 100 µm		1	max. 8	

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 edition.