



Nycodiel 1255

BIODEGRADABLE DIELECTRIC FLUID

IEC 61099 : 1992

Description

Nycodiel 1255 is a biodegradable dielectric fluid based on formulated high performance synthetic ester.

Application

Nycodiel 1255 has been developed to fulfil the demand of the electrical industry looking for a technical and biodegradable alternative to naphtenic based products.

Nyco expertise in specialty ester synthesis, associated with its knowledge in additive formulation, allow to offer a dielectric fluid matching the IEC 61099 standard.

Nycodiel 1255 is used in transformers when a high fire point is requested. Nycodiel 1255 is also used as sparks quencher generated by the open electrical contacts.

Advantages

- Matches IEC 61099 standard
- Excellent oxidation stability (IEC 61125)
- Meets K3 classification (IEC 61100)
- Very low water content
- Biodegradability (OECD 301B)
- NWG (UBA) (Not Hazardous to water)
- Based on renewable raw materials



Characteristic	Unit	Result	Limit	Test method
- Appearance	-	Limpid	Limpid	Visual
- Colour Apha	-	50	max. 200	ISO 2211
- Density at 20°C	kg/dm ³	0.970	max. 1	ISO 12185
- Kinematic viscosity at 100°C 40°C - 20°C	mm ² /s	5.15 26.4 1250	- max 35 max 3000	ISO 3104
- Viscosity index	-	126	-	ISO 2909
- Acid value	mg KOH/g	0.02	max 0.03	ISO 6618
- Flash point COC	°C	275	-	ISO 2592
- Flash point PM	°C	265	min 250	ISO 2719
- Fire point	°C	312	min 300	ISO 2592
- Pour point	°C	- 54	max - 45	ISO 3016
- Dielectric dissipation factor 90°C and 50Hz	-	0.0 2	max 0.030	IEC 60247
- Breakdown voltage	kV	> 60	min 45	IEC 60156
- Water content	mg/kg	40	max 200	MO-10-001
- Resistivity at 90°C	GΩ .m	10	min 2	IEC 60247
- Permittivity at 90°C	-	3.0	-	IEC 60247
- Crystallisation	-	Pass	No crystal	IEC 61099
- Oxidation stability	Total acid Total deposit	mg KOH/g %	0.19 0.008	max 0.30 max 0.010
- Particles count 5 to 15 µ	-	1250	10 000	H.I.A.C.
- Expansion coefficient	°C ⁻¹	7 x 10 ⁻⁴	-	
- Calorific capacity	at 33°C at 90°C	J/kg/K	1923 ± 96 2063 ± 103	-
- Thermal conductivity	at 29°C at 89°C	W/mK	0.119 ± 0.006 0.128 ± 0.006	-
- Biodegradability	%	72	-	OECD 301B
- % renewable raw materials	%	52	-	Calculation

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.