NYCO
INDUSTRY & AUTOMOTIVE

NYCODIEL 1244

TECHNICAL DATA SHEET

BIODEGRADABLE DIELECTRIC FLUID

IEC 61099 : 2010 - IS 16081

DESCRIPTION

NYCODIEL 1244 is a biodegradable dielectric fluid based on a high performance synthetic ester.

APPLICATIONS

NYCODIEL 1244 has been developed to fulfil the demand of the electrical industry for a technical and biodegradable alternative for mineral and silicone based dielectric products.

NYCO's expertise in speciality ester synthesis and know-how in additive formulation allows to offer a dielectric fluid matching IEC 61099 standard.

NYCODIEL 1244 is used in transformers when high fire point and/or biodegradability are requested.

NYCODIEL 1244 can be used as first-fill but is mainly used in traction transformers for maintenance (retro-fill operation).

BENEFITS

- Meets IEC 61099:2010
- Optimized viscosity for better cooling
- Excellent oxidation stability according to IEC 61125 method C
- Low calorific value and high fire point, meets IEC 61039 K3
- Biodegradable according to OECD 301B
- Not hazardous to the environment

PROPERTIES	UNIT	TYPICAL RESULT	IEC 61099	TEST METHOD
Appearance	-	Limpid	Limpid	Visual examination
Colour APHA	-	60	max. 200	ISO 2211
Density at 20°C	kg/dm3	0.983	max. 1	ISO 12185
Kinematic viscosity @ **100°C** **40°C** **-20°C**	mm^2/s	4.6 21.6 650	- max. 35 max. 3000	ISO 3104
Pour point	°C	-45	max. -45	ISO 3016
Flash point PM	°C	255	min. 250	ISO 2719
Fire point	°C	304	min. 300	ISO 2592
Inferior Heating Power	MJ/kg	30.6	-	ASTM D240
Water content	mg/kg	32	max. 200	IEC 60814
Acid value	mg KOH/g	0.01	max. 0.03	IEC 62021-2
Oxidation stability **Total acid** **Total deposit**	mg KOH/g %	0.08 0.007	max. 0.3 max. 0.01	IEC 61125 method C
Breakdown voltage	kV	70	min. 45	IEC 60156
Dielectric dissipation factor 90°C and 50Hz	-	0.01	max. 0.03	IEC 60247
DC Resistivity @ 90°C	GΩ.m	7.5	min. 2	IEC 60247
Crystallisation	-	Pass	Pass	IEC 61099 (Annex A)
% Renewable carbon content	%	62	-	Calculation
Biodegradability, 28 days	%	83	-	OECD 301B

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.