



Naphthenics Product Data Sheet
Nynas Transformer Oil - Nytro 10X

97-04-21

PROPERTY	UNIT	TEST METHOD	GUARANTEED DATA		TYPICAL DATA
			Min	Max	
1. Physical					
Appearance		IEC 296	Clear, free from sediment		
Density, 20°C	kg/dm ³	ISO 12185		0.895	0.876
Viscosity, 40°C	mm ² /s	ISO 3104		8.0	7.6
Viscosity, -30°C	mm ² /s	ISO 3104		800	730
Flash Point, PM	°C	ISO 2719	140		144
Pour Point	°C	ISO 3016		-45	-60
2. Chemical					
Neutralization value	mg KOH/g	IEC 296		0.03	<0.01
Corrosive sulphur		ISO 5662	non-corrosive		
Aromatic content	%	IEC 590			7
Antioxidant, phenols	Wt %	IEC 666			0.3
Water content	mg/kg	IEC 814		30	<20
3. Electrical					
Dielectric dissipation factor at 90°C		IEC 247		0.005	<0.001
Interfacial tension	mN/m	ISO 6295	40		45
Breakdown voltage					
- Before treatment	kV	IEC 156	30		40-60
- After treatment	kV	IEC 296	70		>70
4. Oxidation Stability					
At 100°C 164h		IEC 1125A			
Neutralization value	mg KOH/g				<0.01
Sludge	Wt %				<0.005
At 120°C		IEC 1125B			
Induction period	h		150		>236
At 110°C 28 days		DIN 51554			
Baader test					
- Saponification number	mg KOH/g				0.15
- Sludge	Wt %				<0.005
- Dielectric dissipation factor at 90°C					0.003

NYTRO 10X is an inhibited transformer oil with extremely good electrical properties and very good oxidation stability. This product fully conforms to IEC 296(82), Class IA and IIA.