

Nytro Orion I Transformer Oil

Typical Chemical/Physical Properties				
Property	Unit	Test Method ASTM	Guaranteed Data Min/Max	Typical Data
<u>Physical</u>				
Appearance		D 1524	Clear and Bright	Clear and Bright
Density, 15°C	kg/dm ³	D 1298	0.91 Max	0.885
Viscosity, 40°C	mm ² /s	D 445	12 Max	9.0
Viscosity, 100°C	mm ² /s	D 445	3.0 Max	2.2
Viscosity, 0°C	mm ² /s	D 445	76 Max	59
Flash Point, COC	°C	D 92	145 Min	150
Pour Point	°C	D 97	-40 Max	-60
Aniline Point	°C	D 611	63 Min/84 Max	73
Color		D 1500	.5 Max	<0.5
Interfacial tension at 25°C	mN/m	D 971	40 Min	50
<u>Chemical</u>				
Total Acid No	mg KOH/g	D 974	0.03 Max	<0.01
Corrosive sulphur		D 1275A	Non corrosive	Non corrosive
Corrosive sulphur		D 1275B	Non corrosive	Non corrosive
Antioxidant, phenols	Wt %	D 2668	0.08 Max	≤0.08
Water content	ppm	D 1533	35 Max	<20
PCB content	ppm	D 4059	Not detectable	Not detectable
<u>Electrical</u>				
Dielectric dissipation factor				
at 100°C	%	D 924	0.3 Max	0.1
at 25°C	%	D 924	0.05 Max	<0.01
Breakdown voltage				
-Before treatment	kV	D 877	30 Min	55
-After treatment	kV	D 1816(0.04"gap)	28 Min	36
Impulse breakdown	kV	D 3300	145 Min	>300
Gassing tendency	μL / min	D 2300B	+30 Max	+20

TECHNICAL DATA SHEET

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<u>Oxidation Stability</u>				
After 72 h:				
Sludge	wt%	D 2440	0.15 Max	<0.01
Neutralization No	mg KOH/g	D 2440	0.5 Max	<0.02
After 164 h:				
Sludge	wt%	D 2440	0.3 Max	<0.01
Neutralization No	mg KOH/g	D 2440	0.6 Max	0.10

Type I Nitro Orion is a trace inhibited transformer oil, meeting ASTM D3487 Type I specification requirements.

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