

# Nyswitcho 3X

PROPERTY	UNIT	TEST METHOD	SPECIFICATION LIMITS		TYPICAL DATA
			MIN	MAX	
Physical					
Appearance		IEC 60296	Clear, free from sediment		
Density, 20 °C	kg/dm3	ISO 12185		0.895	0.861
Viscosity, 40 °C	mm2/s	ISO 3104		3.5	2.94
Viscosity, -40 °C	mm2/s	ISO 3104		150	118
Flash Point, PM	°C	ISO 2719	95		99
Pour Point	°C	ISO 3016		-60	<-70
Chemical					
Neutralization value	mg KOH/g	IEC 60296		0.03	<0.01
Corrosive sulphur		ISO 5662	non-corrosive		
Aromatic content	%	IEC 60590			6
Antioxidant, phenols	Wt %	IEC 60666			0.3
Water content	mg/kg	IEC 60814		30	<20
Electrical					
Dielectric dissipation factor at 90 °C		IEC 60247		0.005	<0.001
Interfacial tension	mN/m	ISO 6295	40		44
Breakdown voltage					
- Before treatment	kV	IEC 60156	30		40-60
- After treatment	kV	IEC 60296	70		>70
Oxidation Stability					
At 100 °C 164h		IEC 61125 A			
Neutralization value	mg KOH/g				<0.01
Sludge	Wt %				<0.005
At 120 °C		IEC 61125 B			
Induction period	h		120		>160

NYSWITCHO 3X is a low viscosity switch-gear oil which meets specification IEC 60296(82) Class III A.

Severely Hydrotreated Insulating Oil  
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