HyVolt I Insulating Oils

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HyVolt I

Electrical Insulating Oil Marketing Specification

This uninhibited, electrical insulating oil is produced from a severely hydrotreated naphthenic oil to meet the specification requirements defined in IEC 60296, ed. 4, 2012, general specifications.

TEST DESCRIPTION	TEST METHOD	SPECIFICATIONS		TYPICAL VALUES
Function		**MIN**	**MAX**	
Viscosity, mm^2/s at 40°C	ISO 3104		12.0	9.9
Viscosity, mm^2/s at -30°C	ISO 3104		1800	1162
Pour Point, °C	ASTM D5950		-40	-49
Water Content, mg/kg	IEC 60814		30	7
Breakdown Voltage, kV, Before treatment, 2.5 mm	IEC 60156	30		55
Breakdown Voltage, kV, After treatment, 2.5 mm	IEC 60156	70		75
Density at 20°C, g/ml	ISO 12185		0.895	0.882
DDF at 90°C	IEC 60247		0.005	0.001
Refining/Stability				
Appearance	IEC 60296	PASS		PASS
Acidity, mg KOH/g	IEC 62021-1		0.01	<0.01
Interfacial Tension, mN/m	ASTM D971	40		45
Corrosive Sulfur	DIN 51353	Noncorrosive		Noncorrosive
Corrosive Sulfur	ASTM D1275	Noncorrosive		Noncorrosive
Corrosive Sulfur	IEC 62535	Noncorrosive		Noncorrosive
DBDS, mg/kg	IEC 62697-1	Not detected (<5)		Not detected
Inhibitors, %	IEC 60666	Not detected (<0.01)		Not detected
Metal Passivator Additives, mg/kg	IEC 60666	Not detected (<5)		Not detected
Other Additives	IEC 60296	See [a]		
Furfural Content, mg/kg	IEC 61198	Not detected (<0.05)		Not detected
Carbon Type Analysis, %	IR-Brandes			
Ca				11
Cn				40
Cp				49
Performance				
Oxidation Stability at 120°C, 164 hours	IEC 61125, C			
Total Acidity, mg KOH/g			1.2	0.6
Sludge, %			0.8	0.2
DDF at 90°C			0.500	0.044
Health, Safety and Environment				
Flash Point, PMCC, °C	ISO 2719	135		146
PCA Content, %	IP 346		3	<3
PCB Content, mg/kg	IEC 61619	Not detected (<2)		Not detected
				Dated: 10-30-2015

HyVolt I is a product of Ergon Refining, Inc.

[a] As per IEC 60296, ed. 4, 2012, this product contains no undeclared additives.