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ADVANCED LUBRICATION SPECIALTIES
ISO 9001:2008 Registered

ADVANTAGE HYVOLT II Electrical Insulating Oil

OVERVIEW

ADVANTAGE HYVOLT II is an electrical insulating naphthenic oil that meets the ASTM D-3487 specification for inhibited oils. Its very low pour point, excellent electrical properties and high level of oxidation stability makes ADVANTAGE HYVOLT II ideal for the demanding requirements of today's leading transformer manufacturers.

FEATURES & BENEFITS

ADVANTAGE HYVOLT II has very high dielectric strength that exceeds most international requirements and excellent oxidation stability to reduce sludge and acid formation. Its inherent low pour point gives ADVANTAGE HYVOLT II excellent cooling properties and it can be readily mixed with similar ASTM D-3487 oils.

APPLICATIONS

ADVANTAGE HYVOLT II is designed for use in any electrical application requiring an ASTM D-3487 Type II insulated oil.

SPECIFICATIONS

ASTM D-3487

TYPICAL PROPERTIES

TEST DESCRIPTION	TEST METHOD	SPECIFICATIONS		MARKETING VALUES
PRODUCT CODE 101		MIN	MAX	
Viscosity, sus at 378°C	ASTM D 445		66.0	59.2
Viscosity, SUS at 98.9°C	ASTM D 445		36.0	34.0
Viscosity, cSt atLo°C	ASTM D 445		76.0	64.2
Viscosity, cSt at 40°C	ASTM D 341		12.0	9.3
Viscosity, cSt at 100°C	ASTM D 341		3.0	2.3
Specific Gravity, 156°C	ASTM D 4052		0.9100	0.8862
Flash Point, COC, °C	ASTM D 92	145		155
Color, ASTM	ASTM D 6045		0.5	LO.5
Pour Point, °C	ASTM D 5949		-40	-64
Aniline Point, °C	ASTM D 611	63.0	84.0	74.7
Interfacial Tension, 25°C, dynes, cm	ASTM D 971	40		51
Visual Examination	ASTM D 1524	Clear & Bright		Clear & Bright
Electrical Properties				
Dielectric BreakLdownL at 60 Hz, Disk electrodes, kV	ASTM D 877	30		40
Electrical Properties	ASTM D 1816			47
Power Factor at 60 Hz, 25°C, %	ASTM D 924	35	0.05	0.005
Power Factor at 60 Hz, 100°C, %	ASTM D 924		0.30	0.075
Gassing Tendency, pILlmin	ASTM D 2300		30	12
Chemical Properties				
Oxidation Stability	ASTM D 2440			
72 hr: Sludge, % by mass			0.1	<0.01
Total Acid Number, mg KOHlg			0.3	<0.01
164 hr: Sludge, % by mass			0.2	<0.01
Total Acid Number, mg KOHlg			0.4	<0.01
Oxidation Stability (Rotating Bomb Test), minutes	ASTM D 2112	195		248
Oxidation Inhibitor Content, wt°/o	ASTM D 2668	0.15	0.30	0.26
Corrosive Sulfur	ASTM D 1275 (B)	Noncorrosive		Noncorrosive
Water Content, ppm	ASTM D 1533		35	9
Neutralization Number, mg KOHlg	ASTM D 974		0.03	<0.01
PCB Content, ppm	ASTM D 4059		Not detected	Not detected
Health and Safety Properties (not an ASTM D 3487 requirement)				
Polycyclic Aromatic Compounds, lwt%	IP 346		3	<3
Modified Ames Assay	ASTM E 1687	PASS		PASS

TEST DESCRIPTION	TEST METHOD	SPECIFICATIONS	MARKETING VALUES
FDA Regulation	21 CFR 178.3620 (C)	PASS	PASS