

CALTRAN™ C50 Insulating Oils

PHYSICAL PROPERTIES		METHOD	60-08 C50A	60-08 C50B	N60-30 C50A	60-30 C50B
Class			Class A	Class B	Class A	Class B
Type			Type I	Type I	Type II	Type II
Flash Point, COC (°C)		ASTM D92	151	153	152	153
Viscosity at 40°C (cSt)		ASTM D7279	7.67	8.57	7.76	8.67
Viscosity at 0°C (cSt)		ASTM D445	42.81	50.94	44.60	53.20
Viscosity at -40°C (cSt)		ASTM D445	1,757	2,000	1,822	2,000
Pour Point (°C)		ASTM D97	-67	-65	-64	-56
Color, ASTM		ASTM D1500	L0.5	L0.5	L0.5	L0.5
Dielectric Breakdown at 60 Hz, Disc (kV)		ASTM D877	38	39	39	40
Dielectric Breakdown, VDE at 2 mm gap (kV)		ASTM D1816	46	45	45	60
Dielectric Breakdown Impulse (kV)		ASTM D3300	288	397	397	300
Gassing Tendency (μL/min)		ASTM D2300	25	12	-9	15
Interfacial Tension (dyne/cm)		ASTM D971	48.3	47.3	47.9	48.0
Density at 15°C (kg/m3)		ASTM D4052	0.8768	0.8781	0.8757	0.8762
Power Factor at 25°C (%)		ASTM D924	0.003	0.004	0.001	0.003
Power Factor at 100°C (%)		ASTM D924	0.04	0.04	0.03	0.07
Neutralization Number (mg KOH/g)		ASTM D974	0.010	0.009	0.010	0.003
Strong Acids (mg KOH/g)		ASTM D974	NIL	NIL	NIL	NIL
Corrosive Sulfur		ASTM D1275B	Non-Corrosive	Non-Corrosive	Non-Corrosive	Non-Corrosive
Potentially Corrosive Sulfur		IEC 62535	Non-Corrosive	Non-Corrosive	Non-Corrosive	Non-Corrosive
DBDS Content (ppm)		IEC 62697-1	< 5	< 5	< 5	< 5
Oxidation Inhibitor Content (%)		ASTM D2668	0.06	0.06	0.27	0.26
Oxidation Stability		ASTM D2440				
72 Hours at 110°C	Sludge (%)		0.01	0.01	0.01	0.01
	Acid Number (mg KOH/g)		0.01	0.01	0.01	0.01
164 Hours at 110°C	Sludge (%)		0.01	0.05	0.01	0.03
	Acid Number (mg KOH/g)		0.02	0.01	0.01	0.03
Oxidation Stability, RPVOT (minutes)		ASTM D2112			288	265
Water Content (ppm)		ASTM D1533	13	12	10	15
PCB Content (ppm)		ASTM D4059	< 1	< 1	< 1	< 1
2-Furaldehyde (μg/L)		ASTM D5837	6	6	5	5