

TGZ - Thermal Grease/Gel Series

Thermal Properties

	TGZ10	TGZ20	TGZ30	TGZ50	Test Method
Thermal Conductivity, W/m·K	1 ± 0.2	2 ± 0.2	3 ± 0.25	5 ± 0.2	ASTM D5470
Thermal Resistance, °C·in ² /W @ 20 psi	0.25	0.12	0.08	0.04	

Physical Properties

Appearance	BLUE	GREEN	PINK	GREY	Visual
Viscosity mPa·s@25°C	5,000,000	6,000,000	3,000,000	3,000,000	Rheometer DHR-2
Temperature Range, °F (°C)	-58 - 392 (-50 - 200)	-58 - 392 (-50 - 200)	-58 - 392 (-50 - 200)	-58 - 392 (-50 - 200)	—
Density, lb _m /in ³ (g/cc)	2.4 ± 0.2	2.8 ± 0.2	3.2 ± 0.2	3.2 ± 0.2	ASTM D792
Solubility in Water, % @ 200°C, 24hr	.3 max	.2 max	.2 max	.2 max	SH/T0324-92
Curing Temperature, °F (°C)	266 (130)	266 (130)	266 (130)	266 (130)	—
Curing Time, min	60	60	60	60	—
Volatilize Point, ppm @ 220°C, 24 hr	300 max	200 max	200 max	200 max	GB269-85
Coverage Area Per Gram, cm ² /g	@ 1 mil thickness	16	14	12.7	—
	@ 2 mil thickness	8	7	6.35	
	@ 5 mil thickness	3.2	4.4	2.54	
	@ 10 mil thickness	1.6	1.4	1.27	

Electrical Properties

Volume Resistivity, Ω·cm	1.0x10 ¹⁴ min	1.0x10 ¹⁴ min	1.0x10 ¹⁴ min	1.0x10 ¹⁴ min	Q/SC004-06 GB1410-89
Breakdown Voltage, kV	8 min	8 min	8 min	2.5 min	Q/SC004-06 GB1410-89

Regulatory Properties

RoHS Compliant	Yes	Yes	Yes	Yes	—
Shelf Life, (@25 °C) months @ 25°C	6	6	6	6	—