

Flame Retardant Epoxy Encapsulating and Potting Compound 833FRB



NEW

A two component self extinguishing epoxy compound. Provides insulation and protects sensitive components and circuits from: static discharge, impact, heat, shock, conductivity, abuse, vibration, moisture, fresh and salt water, chemicals and analysis.

Specifications

Standards		
Flame test UL 94V-0	UL Recognition	under testing
Uncured Properties - Resin [Part A]		
Viscosity	@ 24°C Brookfield 30 RPM Spindle 4	4000 cps
Phase		Liquid
Color		Black
Specific Gravity		1.24
Odor		Mild
Flash Point		190 °C
Uncured Properties - Hardener [Part B]		
Viscosity	@ 24°C Brookfield 30 RPM Spindle 4	14000 cps
Phase		Liquid
Color		Grey
Specific Gravity		1.13
Odor		Musty
Flash Point		105 °C
Uncured Properties - Mixed		
Viscosity	@ 20°C Brookfield 50 RPM Spindle 4	11500 cps
Specific Gravity		1.21
Color		Black
Mixing Ratio (Part A & B)		
Volume Mixing Ratio		2 (resin): 1 (hardener)
Mass Mixing Ratio		2 (resin): 1 (hardener)
Working Time		1 hour
Curing Time (100 g)		
@ room temperature		24 hours
@ 65°C / 149 °F		60 minutes
@ 80°C / 176 °F		45 minutes
@ 100°C / 212 °F		35 minutes
Cured Properties - Physical		
Tensile Strength	ASTM D638	under testing
Tensile Strength and Elongation	ASTM D882 (Method A) or ISO 527-3	under testing
Izod Impact	ASTM D256 Method A or ISO 180	under testing
Tensile Impact	ASTM D1822 or ISO 8256	under testing
Flexural Strength	ASTM D790 or ISO 178	under testing
Dimensional Stability	ASTM D1042 (ISO 2796)	under testing
Compressive Strength	ASTM D695	1310 kg/cm ²
Lap shear Strength	ASTM 790 or ISO 178	59.3 kg/cm ²
Hardness (shore D)		78-80

Cured Properties - Electrical		
Surface Resistivity @ 23°C/35%RH	ASTM D257	2×10^{15} Ohms/square
Volume Resistivity	ASTM D257	under testing
Dielectric Strength	ASTM D149	under testing
Dielectric Constant / Dissipation Factor (tested @ 161")	ASTM D150-98	
@ 60 Hz		3.45 / 0.018
@ 1 KHz		3.40 / 0.012
@ 10 KHz		3.31 / 0.013
@ 100 KHz		3.25 / 0.014
@ 1 MHz		3.18 / 0.014
Comparative Tracking Index	ASTM D3638	under testing
High Voltage Arc Tracking	UL 746A	under testing
High Voltage Arc Resistance to Ignition	UL 746A	under testing
High Current Arc Ignition	UL 746A	under testing
High Voltage low current Arc Resistance	ASTM D495	under testing
Cured Properties - Thermal		
Tg (Glass Transition Temp.)	ASTM D3418	56 °C
HDT (High Deflection Temp.)	ASTM D648, ISO 75	
Maximum withstand temp.		225 °C
Constant Service temp.		175 °C
Cured Properties - Additional Properties		
Outgassing	ASTM E595	
Total mass loss (TML)		1.45 %
Collected Volatile condensable Material (CVCM)		0.03 %
Water Vapour Regain (WVR)		0.10 %
Ash content	ISO 3451/1	under testing
Water Absorption	ASTM D570, ISO 2896	under testing

Available Sizes

Catalog Number	Sizes Available	Description
833FRB-375ML	375 mL (12 oz)	Liquid
833FRB-3L	3 L (0.8 gallon)	Liquid
833FRB-60L	60 L (16 gallons)	Liquid