



E 3938A

Description E 3938A is a fiberglass reinforced epoxy molding compound, with excellent dimensional stability, good strength, and excellent electrical insulation properties.

Available colors Black

Available molding grades Compression, Transfer

Form Granular

EPOXY

Properties		International Units		English Units		Method	
Physical	Specific Gravity	1.90		1.90		ASTM D792	
	Apparent (Powder) density	0.75	g/cm ³	6.3	lb/gal	ASTM D1895	
	Molding shrinkage	0.1	%	0.001	in/in	ASTM D955	
	Post shrinkage	-	%	-	in/in	ASTM D955	
	Water absorption		%		%	ASTM D570	
	24 hour	-	%	-	%	ASTM D570	
	48 hour	0.20	%	0.20	%	ASTM D570	
Thermal	Temperature of deflection under load		°C at 1.8 MPa	488	°F at 264 psi	ASTM D648A	
		As Molded	215	°C at 1.8 MPa	>555	°F at 264 psi	ASTM D648A
		Post Baked	>282	°C at 1.8 MPa			ASTM D648A
	Thermal Conductivity	-	W/mK	-	W/mK	ASTM C518	
	UL Temperature Index	-	°C	-	°F	UL 746B	
	UL-flammability		-	-	-	UL 94	
	3.2 mm	-	-	-	UL 94		
	1,6 mm	-	-	-	UL 94		
Mechanical	Coefficient of linear thermal expansion		10 E-6/°C	10.6	10 E-6/°F	ASTM E831	
		parallel	19	10 E-6/°C	16	10 E-6/°F	ASTM E831
		perpendicular	28	10 E-6/°C	16	10 E-6/°F	ASTM E831
	Flexural strength	159	MPa	23,000	psi	ASTM D790	
	Flexural modulus	-	GPa	-	Mpsi	ASTM D790	
	Tensile strength	86	MPa	12,500	psi	ASTM D638	
	Izod impact strength, notched	27	J/m	0.5	ft lb/in	ASTM D256A	
Compressive strength	248	MPa	36,000	Psi	ASTM D695		
Rockwell Hardness		-	-	-	ASTM D785		
	M Scale	-	-	-	ASTM D785		
	E Scale	-	-	-	ASTM D785		
Electrical	Dielectric Constant, 1 MHz, wet	4.1		4.1		ASTM D150	
	Dissipation Factor, 1 MHz, wet	0.01		0.01		ASTM D150	
	Arc Resistance	186	Seconds	186	Seconds	ASTM D495	
	Dielectric strength, 60 Hz	16.4/-	kV/mm	415/-	V/mil	ASTM D149	
		ST, dry/wet	16.4/-	kV/mm	415/-	V/mil	ASTM D149
	SS, dry/wet	-/-	kV/mm	-/-	V/mil	ASTM D149	
Tracking resistance	-	V	-	V	ASTM D3638 (IEC 112)		

Properties measured on compression molded ASTM specimens. Values are typical, not statistical minimums.

Contact your Sumitomo Bakelite representative for specifications and post baking recommendations.

ST = short time. SS = step-by-step. Wet = immersed in H₂O for 48 hrs. at 50 °C prior to testing.

Certification to ASTM D-5948 requires batch testing. All testing in accordance with ASTM D-5948. ASTM D-5948 supersedes MIL-M-14.

RoHS: E 3938A is in compliance with RoHS2 (2011/65/EU, Restriction of Hazardous Substances).

PFOS: E 3938A does not contain perfluorooctansulfonate (PFOS) according to European Directive 2006/122/EC.

REACH/SVHC : E 3938A does not contain any Substances of Very High Concern (SVHC) as listed on the candidate list published by ECHA..

Revision Date: 7/3/2014. Shelf life 6 months when stored at 40 °F maximum.

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