



## E 8354-19189-2

**Description** E 8354-19189-2 is a glass and mineral reinforced epoxy molding compound, formulated for the encapsulation of devices requiring high quality and thermal shock resistance.

**Available colors** Black

**Available molding grades** Compression, Transfer

**Form** Granular

EPOXY

Properties		International Units		English Units		Method	
Physical	Specific Gravity	<b>1.84</b>		<b>1.84</b>		ASTM D792	
	Apparent (Powder) density	<b>0.8</b>	g/cm <sup>3</sup>	<b>6.7</b>	lb/gal	ASTM D1895	
	Molding shrinkage	<b>0.30-0.35</b>		<b>0.003-0.0035</b>		ASTM D955	
	Post shrinkage	-	%	-	in/in	ASTM D955	
	Water absorption	24 hour	-	%	-	%	ASTM D570
48 hour		<b>0.15</b>	%	<b>0.15</b>	%	ASTM D570	
Thermal	Temperature of deflection under load	As Molded	-	°C at 1.8 MPa	-	°F at 264 psi	ASTM D648A
		Post Baked	<b>&gt;282</b>	°C at 1.8 MPa	<b>&gt;555</b>	°F at 264 psi	ASTM D648A
	Thermal Conductivity	-	W/mK	-	W/mK	ASTM C518	
	UL Temperature Index	-	°C	-	°F	UL 746B	
	UL-flammability	3.2 mm	-	-	-	-	UL 94
		1,6 mm	-	-	-	-	UL 94
Coefficient of linear thermal expansion	parallel	<b>17</b>	10 E-6/°C	<b>9.4</b>	10 E-6/°F	ASTM E831	
	perpendicular	-	10 E-6/°C	-	10 E-6/°F	ASTM E831	
Mechanical	Flexural strength	<b>124</b>	MPa	<b>18,000</b>	psi	ASTM D790	
	Flexural modulus	<b>16.5</b>	GPa	<b>2.4</b>	Mpsi	ASTM D790	
	Tensile strength	<b>72</b>	MPa	<b>10,500</b>	psi	ASTM D638	
	Izod impact strength, notched	<b>24</b>	J/m	<b>0.45</b>	ft lb/in	ASTM D256A	
	Compressive strength	<b>210</b>	MPa	<b>30,500</b>	Psi	ASTM D695	
	Rockwell Hardness	M Scale	-	-	-	-	ASTM D785
E Scale		-	-	-	-	ASTM D785	
Electrical	Dielectric Constant, 1 MHz, wet	<b>4.8</b>		<b>4.8</b>		ASTM D150	
	Dissipation Factor, 1 MHz, wet	<b>0.014</b>		<b>0.014</b>		ASTM D150	
	Arc Resistance	<b>180</b>	Seconds	<b>180</b>	Seconds	ASTM D495	
	Dielectric strength, ST, dry/wet	<b>-/-</b>	kV/mm	<b>-/-</b>	V/mil	ASTM D149	
	60 Hz, SS, dry/wet	<b>14.7/-</b>	kV/mm	<b>375/-</b>	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 H<sub>2</sub>O 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 8354-19189-2 is in compliance with RoHS2 (2011/65/EU, Restriction of Hazardous Substances).

PFOS: E 8354-19189-2 does not contain perfluorooctansulfonate (PFOS) according to European Directive 2006/122/EC.

REACH/SVHC : E 8354-19189-2 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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