



A QUAKER HOUGHTON COMPANY

**TECHNICAL BULLETIN**  
**Epoxy Potting Compound**  
**SS1836X-1**

**Description**

EPMAR SS1836X-1 is a black, two component filled epoxy. This epoxy was developed for the potting of electronic modules.

**Performance**

	<b>Part A</b>	<b>Part B</b>
<b>Color</b>	Black	Tan
<b>Specific Gravity</b>	1.51	1.53
<b>Viscosity at 25° C</b>	26,600 cps	7,400 cps
<b>Brookfield RVT Spindle 6 Speed 10</b>	10,600 cps	Mixed
<b>Filler Content</b>	48%	54.5%
<b>Shelf Life @ 25° C</b> (Minimum from date of Shipment)	12 months	12 months
<b>Note: Values not intended for use in specification preparation.</b>		

**Physical Characteristics**

<b>Color</b>	Black
<b>Filler Content</b>	51.2%
<b>Hardness, Shore D</b>	76 ± 5
<b>Operating Temperature</b>	105° C
<b>Water Absorption</b>	1.0 (% in 24 hours)
<b>Thermal Conductivity</b>	11 x 10 <sup>-4</sup> cal x cm/(sec x cm <sup>2</sup> x °C)
<b>Glass Transition (T<sub>g</sub>)</b>	50° C
<b>Coefficient of Linear Thermal Expansion</b>	80.5 / 141 Um/m-C (above / below T <sub>g</sub> )
<b>Dielectric Strength</b>	420 Volts per mil
<b>Dielectric Constant @ 25° C, 100 Hz / 1 Hz</b>	6.47 / 5.86
<b>Dissipation Factor @ 25° C, 100 Hz / 1 Hz</b>	0.093 / 0.061
<b>Volume Resistivity @ 23° C</b>	1.1 x 10 <sup>14</sup>
<b>Mix Ratio</b>	1:1 by weight or volume
<b>Pot Life (200 gram mass @ 25° C)</b>	45 minutes
<b>Gel Time</b>	150 minutes
<b>Mix Viscosity</b>	10,600 cps
<b>Cure Schedule @ 25° C</b>	6 hours @ RT Handling Strength 7 day – Ultimate Properties 3 hours @ 60° C



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**Warranty:**

The following warranty is made in lieu of all other warranties, either expressed or implied. This product is manufactured of selected raw materials by skilled technicians. Neither seller nor manufacturer has any knowledge or control concerning the purchaser's use of this product and no warranty is made as to the results of any use. The only obligation of either seller or manufacturer shall be to replace any quantity of this product, which is proved to be defective. Any claim of defective product must be received in writing within one (1) year from date of shipment. Neither seller nor manufacturer assumes any liability for injury, loss, or damage resulting from use of this product.

**Contact us for any additional application information.**

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Rev 082819