



Epoxy &  
Polyurethane  
Manufacturing and  
Research

# TECHNICAL BULLETIN

## EPMAR® SS1836X Flame Retardant Epoxy System

### Description

EPMAR® SS1836X is a black, two component, flame retardant, filled epoxy. This epoxy was developed for the potting of electronic modules. U.L. listed 94VO.

### Performance

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

### Physical Characteristics

Color	Black
Filler Content	51.2%
Hardness, Shore D	76 ± 5
Operating Temperature	105°C
Water Absorption	1.0 (% in 24 hours)
Thermal Conductivity	11 x 10 <sup>-4</sup> cal x cm/(sec x cm <sup>2</sup> x °C)
Coefficient of Linear Thermal Expansion	128 x 10 <sup>-6</sup> in/in/°C
Glass Transition (tg)	50C
Flammability Rating, UL-94VO @ 1/8" - U.L. Listed	103 seconds
Dielectric Strength (volts per mil)	410
Dielectric Constant @25°C., 100 Hz	4.4
Dissipation Factor @ 25°C., 100 Hz	.052
Mix Ratio	1:1 by weight or volume
Pot Life (200 gram mass @ 25°C.)	45 minutes
Gel Time	150 minutes
Mixed Viscosity	10,600 cps
Cure Schedule @ 25°C.	6 hours @ RT Handling Strength 7 day - Ultimate Properties 3 hours @ 60°C.



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

**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.

**Service is part of our formula**

**Epmar Corporation**

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