



Epoxy &
Polyurethane
Manufacturing and
Research

TECHNICAL BULLETIN

EPMAR® SS1873 Module Potting Compound

Description

EPMAR® SS1873 is a two component, filled epoxy compound. The compound consists of SA1873 filled resin and SB1873 filled hardener. This epoxy compound was developed specifically for the potting of electric and electronic modules. SS1873 exhibits outstanding tensile strength and crack resistance under extreme conditions.

Typical Uncured Properties

	Part A	Part B
Color	Black	Tan
Specific Gravity	1.58	1.60
Viscosity at 25°C Brookfield RVT Spindle 4 Speed 20 Filler Content	9,000	6,500
Shelf Life @ 25°C. Months (Minimum from date of Shipment)	6	6

Note: Values not intended for use in specification preparation

Physical Characteristics

Color	Black
Filler Content	55%
Hardness, Shore D	85
Linear Shrinkage	0.5%
Thermal Conductivity	$11 \times 10^{-4} \text{ cal x cm}/(\text{sec x cm}^2 \text{ x } ^\circ\text{C})$
Coefficient of Linear Thermal Expansion 40-100°C, in/in/°C	120×10^{-6}
Glass Transition	54
Dielectric Strength (volts per mil)	500
Volume Resistivity (ohm-cm)	1.5×10^{14}
Dielectric Constant @ 25°C., 100 Hz	4.5
Dissipation Factor @ 25°C., 100 Hz	.062
Water Absorption (24 hours)	1.02%
Mix Ratio	1:1 By weight or volume
Pot Life (200 gram mass @ 23°C.)	90-120 minutes
Gel Time (200 gram mass @ 50°C.)	30 minutes
Exotherm	50°C. in 500 gram mass
Cure Schedule	24-36 hours at room temperature or 3 hours @ 60°C.



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Special Information

SS1873 is filled with a non abrasive filler and can be used in any auto mix, dispensing equipment. Stir part "A" and part "B" prior to use to redisperse filler evenly.

Shipping and Storage Temperature

SS1873 must be protected from exposure to water vapor and from exposure to temperatures below 60°F (16°C) or above 120°F (49°C). Both SA1873 and SB1873 should be stored in a dry place, off cold surfaces at 60°F - 120°F (16°C - 49°C). If shipping or storage temperature should fall below 60°F (16°C), crystallization could result.

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

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