



**Cosmic Plastics Inc**  
HELPING MOLD THE FUTURE



Registered To ISO 9001:2008  
Ref. No. 10000711

## TECHNICAL DATA SHEET

**FARBOSET® 9544**

**DESCRIPTION** Cosmic FARBOSET 9544 is a nonanhydride epoxy powder coating designed as an encapsulant for electronic components, and features excellent resistance to cracking during thermal cycling.

**APPLICATIONS** This compound is designed for coating resistor networks, hybrid circuits, varistors and ceramic capacitors. It is suitable for use on wheel and fluid bed equipment.

### MATERIAL INFORMATION & PROPERTIES

POWDER INFORMATION	SPECIFICATIONS	DATA
Particle Size (U.S. Mesh, %)	+80 max -325	1 35 +/- 5
Cure Time (minutes)	125 °C (257 °F)	60
	150 °C (302 °F)	18
	175 °C (347 °F)	10
Laser Markable		YES
Molded Density	gm/cc	1.44

MOISTURE PROPERTIES	SPECIFICATIONS	DATA
Water Absorption, %	24 hrs @ 23 °C (73 °F)	0.07

STORAGE INFORMATION	SPECIFICATIONS	DATA
Recommended Storage Temperature	°C (°F)	18 (65)
Storage Life <i>(Not more than 40% loss of spiral flow based on original values.)</i>	4 °C (40 °F), months	12
	21 °C (70 °F), months	4

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ELECTRICAL PROPERTIES	SPECIFICATIONS	DATA
Dissipation Factor (ASTM 150)	1 KHz	0.010
Dielectric Constant (ASTM 150)	1 KHz	3.8
Dielectric Strength, (ASTM 149)	volts/mil	850
Surface Resistivity	ohm-cm, x 10 <sup>16</sup>	1.0
Volume Resistivity	ohm-cm, x 10 <sup>15</sup>	8.0

THERMAL PROPERTIES	SPECIFICATIONS	DATA
Glass Transition Temperature (Tg)	°C (°F)	105 (221)
Linear Thermal Expansion, Alpha 1	cm/cm/°C, x 10 <sup>-6</sup>	60
Linear Thermal Expansion, Alpha 2	cm/cm/°C, x 10 <sup>-6</sup>	160
Thermal Conductivity	cal/cm-sec-°C, x 10 <sup>-4</sup>	7.0
Sag Resistance, mm	155 °C (311 °F) / 40° angle	120
Hot Plate Gel Time	@ 150 °C (302 °F), seconds	105

Technical Data Sheets are offered for Reference Only, and are not to be considered as specifications. All tests were performed at room temperature (22 °C) unless otherwise stated, under carefully controlled conditions using transfer molded specimens. Since actual performance is determined by the molding techniques applied, as well as part size and shape, it is recommended that customers conduct their own tests to determine product suitability for their specific application. **Cosmic Plastics, Inc. makes no warranties of merchantability, or any expressed or implied guarantee or representation of fitness or suitability for any application.**