



Registered To ISO 9001:2008 Ref. No. 10000711

## TECHNICAL DATA SHEET

FARBOSET® 2472V0

**DESCRIPTION** 

Cosmic FARBOSET 2472V0 is a mineral-filled novolac epoxy molding compound featuring fast cure rates, excellent moldability and superior thermal shock and moisture resistance. It is specially formulated for improved resistance to moisture ingress, along with a high glass transition temperature for optimum reliability performance.

**APPLICATIONS** 

It is designed to encapsulate a wide range of devices including capacitors, resistors, resistor networks, relays, and high performance coils. Its low viscosity (long spiral flow) allows the molding of delicate components in large, multi-cavity molds.

## **MATERIAL INFORMATION & PROPERTIES**

MOLDING INFORMATION	SPECIFICATIONS	DATA
Bulk Density (powder)	gm/cc	1.0
Molding Pressure	kg/cm <sup>2</sup> psi	14 – 70 200 – 1,000
Molding Temperature	°C °F	145 – 180 293 – 356
Mold Shrinkage	gm.cc	0.005
Cure Time	Minutes @ 150 °C (302 °F)	1 - 2
Molded Density	gm/cc	1.89
Spiral Flow, (EMMI 1-66A)	cm (in)	114 (45)

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

MECHANICAL PROPERTIES	SPECIFICATIONS	DATA
Flexural Strength	psi kg/cm²	16,000 1,125
Flexural Modulus	psi x 10 <sup>6</sup> kg/cm <sup>5</sup>	2.25 1.58
Compressive Strength	psi kg/cm <sup>2</sup>	30,000 2,109
Tensile Strength	psi kg/cm <sup>2</sup>	14,000 984

CERTIFICATIONS	SPECIFICATION	DATA
ASTM D-5948-05 (Mil-M-14)	Туре	GEI-5
Flammability	UL-94, 1/8 inch	V-0

ELECTRICAL PROPERTIES	SPECIFICATIONS	DATA
Arc Resistance	seconds	183
Dissipation Factor	1 KHz	0.003
Dielectric Constant	1 KHz	3.5
Dielectric Strength, (1/8 inch section)	volts/mil	350
Volume Resistivity	ohm-cm, x 10 <sup>15</sup>	8.4
Surface Resistivity	ohm-cm, x 10 <sup>15</sup>	>1.0

THERMAL PROPERTIES	SPECIFICATIONS	DATA
Glass Transition Temperature (Tg)	°C (°F)	165 (329)
Linear Thermal Expansion, Alpha 1	cm/cm/°C, x 10-6	23
Linear Thermal Expansion, Alpha 2	cm/cm/°C, x 10-6	77
Hot Plate Cure Time	@ 150 °C (302 °F), seconds	35

STORAGE INFORMATION	SPECIFICATIONS	DATA
Recommended Storage Temperature	°C (°F)	5 (40)
Storage Life (Not more than 40% loss of spiral flow based on original values.)	5 °C (40 °F), months 25 °C (77 °F), weeks 35 °C (95 °F), days	12 1 2

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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.