



Cosmic Plastics Inc
HELPING MOLD THE FUTURE



Registered To ISO 9001:2008
Ref. No. 10000711

TECHNICAL DATA SHEET

FARBOSET® 1190

DESCRIPTION Cosmic FARBOSET 1190 is a fast curing, mineral & glass-filled, anhydride epoxy molding compound with improved strength properties.

APPLICATIONS It is designed for the encapsulation of coils, transformers, switches and other electrical and electronic components requiring excellent thermal shock resistance. This material exhibits superior resistance to cracking.

MATERIAL INFORMATION & PROPERTIES

MOLDING INFORMATION	SPECIFICATIONS	DATA
Bulk Density (powder)	gm/cc	1.0
Molding Pressure	kg/cm ² psi	3.5 – 70 50 – 1,000
Molding Temperature	°C °F	150 – 180 302 – 356
Mold Shrinkage	cm/cm	0.005
Cure Time	Minutes @ 150 °C (302 °F)	1.5 - 3
Molded Density	gm/cc	1.91
Spiral Flow, (EMMI 1-66A)	cm (in)	69 (27)

ELECTRICAL PROPERTIES	SPECIFICATIONS	DATA
Arc Resistance	seconds	200
Dissipation Factor	1 KHz	0.004
Dielectric Constant	1 KHz	3.8
Dielectric Strength, (short time, 125 mils)	volts/mil	350
Loss Factor	1 KHz	0.015
Volume Resistivity	ohm-cm, x 10 ¹⁶	1.0
Surface Resistivity	ohm-cm, x 10 ¹⁶	1.0

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

MECHANICAL PROPERTIES	SPECIFICATIONS	DATA
Flexural Strength	psi kg/cm ²	20,000 1,406
Flexural Modulus	psi, x 10 ⁶	NA
Compressive Strength	psi kg/cm ²	35,000 2,450
Tensile Strength	psi kg/cm ²	14,000 985
Hardness	Shore D	85
Impact Strength, Izod notched	kg-m/cm ft-lb/inch	0.033 0.60

THERMAL PROPERTIES	SPECIFICATIONS	DATA
Glass Transition Temperature (Tg)	°C (°F)	130 (266)
Linear Thermal Expansion, Alpha 1	cm/cm/°C, x 10 ⁻⁶	NA
Linear Thermal Expansion, Alpha 2	cm/cm/°C, x 10 ⁻⁶	NA
Thermal Conductivity	cal/cm-sec-°C, x10 ⁻⁴	20
Heat Distortion Temperature	°C (18.6 kg/cm ²) °F (264 psi)	110 230
Max Intermittent Operating Temp	°C (°F)	200 (392)
Hot Plate Cure Time	@ 150 °C (302 °F), seconds	42

CERTIFICATIONS	SPECIFICATION	DATA
Flammability	None	NA

STORAGE INFORMATION	SPECIFICATIONS	DATA
Recommended Storage Temperature	°C (°F)	4 (40)
Storage Life	5 °C (40 °F), months	12
<i>(Not more than 40% loss of spiral flow based on original values.)</i>	25 °C (77 °F), weeks	1
	35 °C (95 °F), days	2

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Approved: SC, 2/1/17

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.**