



Cosmic Plastics Inc
HELPING MOLD THE FUTURE



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Ref. No. 10000711

TECHNICAL DATA SHEET

FARBOSET® 1150

DESCRIPTION Cosmic FARBOSET 1150 is a granular, mineral-filled, anhydride epoxy molding compound featuring fast cure rates and excellent hot strength.

APPLICATIONS It is designed for the encapsulation of coils, transformers, bushings, switches and other electrical and electronic components requiring good hot rigidity in molding. This material is used extensively in injection and transfer molding.

MATERIAL INFORMATION & PROPERTIES

| MOLDING INFORMATION | SPECIFICATIONS | DATA |
|---------------------------|------------------------------|------------------------|
| Bulk Density (powder) | gm/cc | 0.95 |
| Molding Pressure | kg/cm ² psi | 3.5 – 70 50 – 1,000 |
| Molding Temperature | °C °F | 150 – 180 302 – 356 |
| Mold Shrinkage | cm/cm | 0.006 |
| Cure Time | Minutes @ 150 °C (302 °F) | 1 - 3 |
| Molded Density | gm/cc | 1.95 |
| Spiral Flow, (EMMI 1-66A) | cm (in) | 125 (49) |

| ELECTRICAL PROPERTIES | SPECIFICATIONS | DATA |
|---|----------------------------|-------|
| Arc Resistance | seconds | 210 |
| Dissipation Factor | 1 KHz | 0.003 |
| Dielectric Constant | 1 KHz | 3.5 |
| Dielectric Strength, (short time, 30 mils) | volts/mil | 400 |
| Loss Factor | 1 KHz | 0.011 |
| Volume Resistivity | ohm-cm, x 10 ¹⁵ | 3.0 |
| Surface Resistivity | ohm-cm, x 10 ¹⁶ | 1.0 |

| MOISTURE PROPERTIES | SPECIFICATIONS | DATA |
|---------------------|---------------------------|-------|
| Water Absorption, % | 24 hrs @ 23 °C (73 °F) | 0.026 |

| MECHANICAL PROPERTIES | SPECIFICATIONS | DATA |
|-------------------------------|---------------------------|-----------------|
| Flexural Strength | psi kg/cm ² | 18,000 1,265 |
| Flexural Modulus | psi, x 10 ⁶ | 2.5 |
| Compressive Strength | psi kg/cm ² | 36,000 3,520 |
| Tensile Strength | psi kg/cm ² | 10,000 700 |
| Hardness | Shore D | 75 |
| Impact Strength, Izod notched | kg-m/cm ft-lb/inch | 0.022 0.40 |

| 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 | 22 |
| Heat Distortion Temperature | °C (18.6 kg/cm ²) °F (264 psi) | 105 221 |
| Max Intermittent Operating Temp | °C (°F) | 190 (374) |
| Hot Plate Cure Time | @ 150 °C (302 °F), seconds | 43 |

| CERTIFICATIONS | SPECIFICATION | DATA |
|----------------|------------------|------|
| Flammability | UL-94, 1/16 inch | HB |

| 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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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.**