



**Cosmic Plastics Inc**  
HELPING MOLD THE FUTURE



Registered To ISO 9001:2008  
Ref. No. 10000711

## **TECHNICAL DATA SHEET**

**EH31 Epoxy**

- DESCRIPTION** Cosmic EH31 is an iron-filled epoxy molding compound which is supplied in a black granular form.
- FEATURES** This material flows easily under low pressure and provides good moldability.
- APPLICATIONS** This material is good for EMI / RFI shielding, and can be either compression or transfer molded to fabricate core rods, or to encapsulate surface mount and axial leaded inductors. This single molded compound eliminates the labor intensive over/under molding.

### MATERIAL INFORMATION & PROPERTIES

| MOLDING INFORMATION   | SPECIFICATION  | DATA                   |
|-----------------------|----------------|------------------------|
| Specific Gravity      |                | 2.5                    |
| Bulk Factor           |                | 2.5                    |
| Molding Pressure      | psi            | 50 – 800               |
| Molding Temperature   | °C<br>°F       | 130 – 180<br>266 - 350 |
| Spiral Range          | Inches (EMMI)  | 20 - 30                |
| Recommended Post Cure | Hours @ 160 °C | 2 - 4                  |

| STORAGE      | SPECIFICATION           | DATA |
|--------------|-------------------------|------|
| Storage Life | 5 °C (40 °F),<br>months | 4    |

| ELECTRICAL PROPERTIES | SPECIFICATION | DATA               |
|-----------------------|---------------|--------------------|
| Inductance            | Ls (μH)       | 0.1924 –<br>0.1975 |
| Quality Factor        |               | 2.9                |

| TEST CONDITIONS | SPECIFICATION | DATA |
|-----------------|---------------|------|
| Frequency       | MHz           | 1    |
| Specimen        | Rod, inches   | 1/16 |
| Wire Size       | Inches        | .008 |
| No. of Turns    |               | 25   |

**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.**

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