

**PRODUCT DESCRIPTION**

Hysol® MG40FS is a high productivity molding compound designed specifically for high volume encapsulation of PDIP, SOIC, Power discrete and High Voltage devices. The material is applicable for devices having chip dimensions up to 150 mils square.

**PROPERTIES OF UNCURED MATERIAL**

Color	Black
Spiral Flow, inches @ 175°C	35
Hot Plate Gel Time, @ 175°C, seconds	25
Shelf Life @ 5°C, months	12

**TYPICAL CURED PROPERTIES**

All measurements taken at 25°C unless otherwise noted. All physical, electrical and analytical measurements taken on specimens cured for two minutes at 175°C with post cure of 6 hours at 175°C, unless otherwise specified.

Glass Transition Temperature, °C	160
Coefficient of Thermal Expansion, in/in/°C	
(50-1100°C) x 10 <sup>-6</sup>	20
(220-240°C) x 10 <sup>-6</sup>	75
Specific Gravity	1.84
Flexural Strength, psi	19,000
Flexural Modulus, psi	2.4 x 10 <sup>6</sup>
Thermal Conductivity, CGS units	18 x 10 <sup>-4</sup>
Flammability Rating @ 1/8 inch thickness	V-0
Moisture Absorption, 15 psi steam, % 100 hours	0.70
Volume Resistivity, 500 volts, ohm-cm x 10 <sup>16</sup>	1.0
Water Extract Data, 20 hour water boil	
conductivity, micromhos	40
pH of extract	4.3
chloride content, ppm	5.0
sodium content, ppm	5.0

**HANDLING**

MG40FS has been formulated to provide the best possible moldability and as wide a molding latitude as possible. Although molding and curing conditions will vary from situation to situation, recommended starting ranges are shown below.

Preheat Temperature, °C	80-90
Molding Temperature, °C	170-190
Transfer Pressure, Kgf/cm <sup>2</sup>	40-80
Transfer Time, sec.	5-10
In-mold cure Time, sec.	60-90
PMC Temperature, °C	175
PMC Time, hrs.	4-6

**GENERAL INFORMATION**

**For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).**

**This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or their strong oxidizing materials.**

**STORAGE**

Powder Storage – Powder or performs should be stored at 5°C or below, in closed containers. After removal from cold storage, the material MUST be allowed to come to room temperature, in the sealed container, to avoid moisture contamination. The suggested waiting time for a standard 15 Kg carton box is 24 hours.

**DATA RANGES**

The data contained herein may be reported as a typical value and/or range values based on actual test data and are verified on a periodic basis.

**Disclaimer NOTE**

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Hysol Huawei is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

**TRADEMARK USAGE**

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