

**HYSOL GR750**

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PRODUCT DESCRIPTION

HYSOL GR750 provides the following product characteristics:

Technology	Epoxy
Appearance	Black
Filler Type	Silica
Filler Weight, %	86±1
Typical Package	High power devices
Product Benefits	High Tg Low stress Good moldability Good adhesion

HYSOL GR750 is a technologically advanced green epoxy molding compound designed for high power devices especially for high temperature application. It delivers outstanding performance and ease of use.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Property	Typical Value
Spiral Flow, @ 175°C, inches	56
Gel Time @ 175°C, seconds	42
Shelf Life @ 5°C, days	183
Specific Gravity, g/cm ³	1.97

TYPICAL PROCESS DATA

Handling	Typical Value
Preheat Temperature, convental mold, °C	80 to 100
Molding Temperature, °C	175 to 200
Transfer Pressure, Kg/cm ²	40 to 100
Transfer Time, seconds	6 to 20
Curing Time, 3 mm section: @ 180°C, seconds	120 to 180
Post Mold Cure @ 175 to 190 °C, hours	4 to 12

HYSOL GR750 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 above.

TYPICAL PROPERTIES OF CURED MATERIAL

All measurements taken at room temperature unless otherwise noted. All physical, electrical and analytical measurements taken on specimens cured for 2 minutes @ 175°C with post cure of 6 hours @ 175°C, unless otherwise specified.

Physical Properties Property	Typical Value
Glass Transition Temperature (Tg), °C	185
Coefficient of Thermal Expansion, ppm/°C:	
Below Tg	9
Above Tg	47
Storage Modulus @ RT, MPa	21385
@ 175°C, MPa	8217
@ 260°C, MPa	1373
Tg by peak of tanδ, °C	190
Flexural Strength @ 25/260°C, MPa	118 / 15
Flexural Modulus @ 25/260°C, MPa	17012 / 875
Moisture Absorption, 24 hours PCT, %	0.46

Application Specific Properties

Extractable Ionic Content, 20hrs, ppm	
Cl-	8
Na+	4
pH	5.8

GENERAL INFORMATION

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

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product

Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Powder Storage - Powder or preforms 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 pail is 24 hours.

Material removed from containers may be contaminated during use. Do not return product to the original container. Hysol Huawei Electronics Ltd. cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\text{N} \times 0.225 = \text{lb}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{N/mm}^2 \times 145 = \text{psi}$
 $\text{MPa} \times 145 = \text{psi}$
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$
 $\text{mPa}\cdot\text{s} = \text{cP}$

NOTE

This product is a developmental product. It is not now, and may not be in the future, commercially available. The properties of the uncured material and the physical properties of the cured material have been established as a point of reference only. The information provided in this Lab Data Sheet (LDS) including the recommendations for use and application of the product are based on our best knowledge and experience of the product as at the date of this LDS. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide.

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