

**HYSOL GR700**
(LMC20043-N11)

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PRODUCT DESCRIPTION

HYSOL GR700 provides the following product characteristics:

Technology	Epoxy
Appearance	Black
Filler Type	Spherical silica
Filler Weight, %	89.5
Filler cut	75µm
Typical Package(s)	SOT/SOD, SMX, SOIC, TSOP, QFP
Product Benefits	<ul style="list-style-type: none">● Halogen free● High adhesion● Low stress● Low moisture absorption● High reliability
Flammability Rating	UL 94 V0 @ 1/8 inch thickness

HYSOL GR700 is a green molding compound designed for MSL1 delamination requirement.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Property	Typical Value
Spiral Flow, @ 175°C, inches	48
Gel Time @ 175°C, seconds	40
Shelf Life @ 5°C, days	183
Specific Gravity, g/cm ³	2.01

TYPICAL PROCESS DATA

Handling	Typical Value
Preheat Temperature, conventional mold, °C	70~90
Molding Temperature, °C	170~190
Transfer Pressure, Kg/cm ²	40~85
Transfer Time @ 175°C, seconds	5~15
Hot Hardness, Shore D @ 175 °C, after 90sec	80
Curing Time @ 175 °C, seconds	60~120
Post Mold Cure @ 175 °C, hours	4~8

HYSOL GR700 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 175°C 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) via TMA, °C	124
Coefficient of Thermal Expansion, ppm/°C:	
Below Tg	7
Above Tg	31
Flexural Modulus @ 25°C, N/mm ²	23919
Flexural Strength @ 25°C, N/mm ²	146
Moisture Absorption, 24 hours PCT, %	0.17
DMA Modulus:	
@ 25 °C	25,265(N/mm ²)
@ 175 °C	569 (N/mm ²)
@ 260 °C	562 (N/mm ²)
Application Specific Properties	
Thermal Conductivity, W/(m-K)	0.93
Volume Resistivity @ 21 °C, 500 Volts, ohms-cm	38x10 ¹⁵
Dielectric Constant @ 1MHz	3.6

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.

Optimal Storage: 5°C. Storage greater than 5°C can adversely affect product properties. Material removed from containers may be contaminated during use. Do not return products to the original container. Hysol Huawei Electronics Co., 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 Hysol Huawei Electronics Co., Ltd. Technical Service Center or Customer Service Representative.

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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