Lab Data Sheet

# HYSOL GR700
**(LMC20572-P2)**

May. 2020

## PRODUCT DESCRIPTION

**HYSOL GR700** provides the following product characteristics:

| **Technology** | **Epoxy** |
|---|---|
| Appearance | **Black** |
| Filler Type | **Fused silica** |
| Filler Weight, % | **89±1** |
| Filler cut | **75μm** |
| Typical Package(s) | SOP, DPAK,QFP, QFN |
| Product Benefits | ● Halogen free<br>● Low stress<br>● High adhesion<br>● Low moisture absorption<br>● High reliability |

HYSOL GR700 is a green molding compound designed for SOP MSL1**.**
HYSOL GR700 **m**eets UL 94 V-0 Flammability at 1/8 inch thickness.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

| **Property** | **Typical Value** |
|---|---|
| Spiral Flow, @ 175°C, inches | 35 |
| Gel Time @ 175ºC, seconds | 24 |
| Shelf Life @ 5ºC , days | 183 |
| Specific Gravity, g/cm³ | 2.00 |

## TYPICAL PROCESS DATA

| **Handling** | **Typical Value** |
|---|---|
| Preheat Temperature,convental mold, ºC | 70 to 90 |
| Molding Temperature, °C | 170 to 185 |
| Molding Pressure, Kg/cm² | 40 to 85 |
| Transfer Time, seconds | 8 to 15 |
| Curing Time, seconds | 110 to 150 |
| Post Cure Time, hours | 4 to 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), °C | 115 |
| Coefficient of Thermal Expansion , ppm/°C: | |
| *Below Tg* | 7 |
| *Above Tg* | 29 |
| Flexural Modulus @ 25°C, N/mm² | 22183 |
| Flexural Strength @ 25ºC, N/mm² | 166 |
| Moisture Absorption , 24 hours PCT , % | 0.15 |

| **Application Specific Properties** | |
|---|---|
| Thermal Conductivity , W/(m-K) | 0.9 |
| Volume resistivity @ 25°C, 500 V, Ω-cm | $16\times10^{16}$ |

## 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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