



## **HYSOL GR320**

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#### PRODUCT DESCRIPTION

HYSOL GR320 provided the following product characteristics:

| Technology       | Ероху                 |
|------------------|-----------------------|
| Cure             | Heat cure             |
| Appearance       | Black                 |
| Filler Type      | Crystal silica        |
| Filler Weight, % | 70-85%                |
| Filler cut       | 180um                 |
| Application      | Molding compound      |
| Target Package   | Opto coupler          |
| Product Benefits | Excellent workability |
|                  | High reliability      |

GR320 provides with excellent performance. This material has been specifically designed to improve reliability and workability property.

#### TYPICAL PROPERTIES OF UNCURED MATERIAL

| Spiral Flow, @175°C, inches | 25 |  |
|-----------------------------|----|--|
| Gel Time, @175°C, seconds   | 21 |  |
| Shelf Life, @ 5°C , months  | 12 |  |

### **TYPICAL PROCESS DATA**

| Handling                                    | Typical Value |
|---|---------------|
| Preheat Temperature, conventional mold, °C  | 70~90         |
| Molding Temperature, °C                     | 160~180       |
| Transfer Pressure, Kgf/cm <sup>2</sup>      | 40~85         |
| Transfer Time @ 175°C, seconds              | 5~12          |
| Hot Hardness, Shore D @ 175 °C, after 90sec | 79            |
| Curing Time @ 175 °C, seconds               | 100~120       |
| Post Mold Cure @ 175 °C, hours              | 4~8           |

HYSOL GR320 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.

Please contact Hysol Huawei Technical Service for alternative process parameters if needed.

#### TYPICAL PROPERTIES OF CURED MATERIAL

All measurements are taken at 25°C unless otherwise noted.

All physical, electrical and analytical measurements are taken on specimens cured for 120 seconds @ 175°C with post cure of 6 hours @ 175°C, unless otherwise specified.

## **Physical Properties**

| Property | Typical Value |
|----------|---------------|
|          |               |

| Glass Transition Temperature, °C: (Tg) via TMA  | 177   |  |  |
|---|-------|--|--|
| Coefficient of Thermal Expansion , TMA, ppm/°C: |       |  |  |
| Below Tg  | 20.7  |  |  |
| Above Tg  | 69.3  |  |  |
| Flexural Modulus @ 25°C, MPa                    | 13021 |  |  |
| Flexural Strength @ 25°C, MPa                   | 134   |  |  |
| Moisture Absorption, 24 hours PCT, %            | 0.42  |  |  |
| Specific Gravity                                | 1.95  |  |  |

#### **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 Hysol Huawei Electronics Co., Ltd. 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 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.

Material removed from containers may be contaminated during use. Do not return product 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 or Customer Service Representative.

# 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 best knowledge and experience of the product as at the date of this TDS. Hysol Huawei Electronics Co., Ltd. is, 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 regarding the concerned product is excluded.