

**HYSOL GR30**3000070
Sept 2023**PRODUCT DESCRIPTION**

HYSOL GR30 provides the following product characteristics:

Technology	Epoxy
Appearance	Black
Filler Type	Fused silica
Filler Weight, %	81±3
Filler cut	100µm
Typical Package(s)	DO,TO, Rotor
Product Benefits	• Green product • Non-conductive • High mold ability • High reliability • Low cost of ownership

Hysol GR30 epoxy molding compound delivers outstanding performance and ease of use. This material is designed to achieve JEDEC Level 1 requirements, at 260°C reflow temperature.

GR30 meets UL 94 V-0 Flammability at 1/8 inch thickness.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Property	Typical Value
Spiral Flow, @ 175°C, inches	28
Gel Time @ 175°C, seconds	16
Shelf Life @ 5°C, days	183
Specific Gravity, g/cm ³	1.89

TYPICAL PROCESS DATA

Handling	Typical Value
Preheat Temperature, °C	80 to 100
Molding Temperature, °C	150 to 195
Molding Pressure, Kg/cm ²	40 to 100
Transfer Time	
Conventional mold,seconds	10 to 15
Automold,seconds	4 to 10
Curing Time, seconds	60 to 120
Post Cure Time, hour	4 to 6

HYSOL GR30 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

	Typical Value
Glass Transition Temperature (Tg), °C	169
Coefficient of Thermal Expansion, ppm/°C:	
Below Tg	13
Above Tg	58
Flexural Modulus @ 25°C, N/mm ²	16500
Flexural Strength @ 25°C, N/mm ²	115
DMA Modulus:	
@ 25 °C, (N/mm ²)	20200
@ 175 °C, (N/mm ²)	6100
@ 260 °C, (N/mm ²)	1700
Moisture Absorption, 24 hours PCT, %	0.55
Shrinkage,%,	0.23

Application Specific Properties

Thermal Conductivity, W/(m·K)	0.8
pH of extract @ 100 °C, after 20 hours	5.0
Extractable Ionic Content @ 100 °C, after 20 hours extract, ppm:	
Chloride (Cl-)	12
Sodium (Na+)	7
Volume resistivity @ 25°C, 500 V, Ω·cm	12×10 ¹⁵
Dielectric Constant @ 1MHz	3.7

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.

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.

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