Lab Data Sheet

HYSOL GR710F

Jul. 2022

PRODUCT DESCRIPTION

HYSOL GR710F provides the following product characteristics:

Technology	**Epoxy**
Appearance	**Black**
Filler Type	**Spherical silica**
Filler Weight, %	**88±1**
Filler cut	**75μm**
Typical Package(s)	TO,SOIC,TSOP,SSOP
Product Benefits	● Halogen free ● High adhesion ● Low moisture absorption ● High reliability ● Good electrical performance

HYSOL GR710F is a green molding compound designed for SOP**.**
HYSOL GR710F meets UL 94 V-0 Flammability at 1/8 inch thickness.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Property	**Typical Value**
Spiral Flow, @ 175°C, inches	37
Gel Time @ 175ºC, seconds	31
Shelf Life @ 5ºC , days	183
Specific Gravity, g/cm³	1.98

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	7 to 15
Curing Time, seconds	90 to 150
Post Cure Time, hours	4 to 8

HYSOL GR710F 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	9
Above Tg	37
Flexural Modulus @ 25°C, N/mm²	24300
Flexural Strength @ 25ºC, N/mm²	142
Moisture Absorption , 24 hours PCT , %	0.2
Shrinkage, %	0.2

Application Specific Properties	
Thermal Conductivity , W/(m-K)	0.86
Volume Resistivity @ 21°C, 500 V, Ω-cm	50×10^{15}
Water Extract Data, 20 hours water boil:	
Conductivity, μmhos/cm	20
pH of extract	5.0
Extractable Ionic Content, ppm:	
Chloride (Cl-)	9
Sodium (Na+)	4

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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