



Technical Data Sheet MG21F-02

November 2017

PRODUCT DESCRIPTION

Hysol® MG21F-02 is ECN base molding compound suitable for medium voltage applications. MG21F-02 has excellent moldability on bridge and axial packages.

PROPERTIES OF UNCURED MATERIAL

Color	Black
Spiral Flow, @ 175°C, inches	25
Hot Plate Gel Time, @ 175°C, seconds	22
Filler Content, %	71
Shelf Life @ 5°C, months	12

TYPICAL CURED PROPERTIES

All measurements taken at 25°C unless otherwise noted. All physical, electrical and analytical measurements taken on specimens cured for two minutes at 175°C with post cure of 6 hours at 175°C, unless otherwise specified.

Glass Transition Temperature, °C	175
Coefficient of Thermal Expansion, in/in/°C	
50° - 100°C, x 10 ⁻⁶	19
220° - 240°C, x 10 ⁻⁶	62
Specific Gravity	1.80
Molded Shrinkage, %	0.23
Flexural Strength, Kg/mm ²	13
Flexural Modulus, Kg/mm ²	1400
Thermal Conductivity, W/m.K	0.65
Flammability Rating @ 1/8" thickness	V-0
Moisture Absorption, 85°C/85%RH, %	
168 hours	0.22
Volume Resistivity, 500 volts, ohm-cm	
@ 21°C x 10 ¹⁵	20
Water Extract Data, 20-hour water boil,	
conductivity, micromhos	3.0
pH of extract	4.5
chlorides, ppm	5
sodium content, ppm	2

HANDLING

MG21F-02 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 below.

Preheat Temperature, °C	75-95
Molding Temperature, °C	160-190
Molding Pressure, psi	500-1500
Transfer Time, seconds	
Conventional mold	15-25
Automold	12-20
Curing Time, 1/8" section, seconds	
@ 160°C	75-105
@ 170°C	60-90
@ 190°C	35-60
@ 210°C	20-35

Cure Time in Mold, Seconds

Conventional mold @ 175°C	70-90
Automold @ 175°C	50-70

Post Cure Time, hours@ 175°C	2-6
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GENERAL INFORMATION

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or their strong oxidizing materials.

STORAGE

Powder Storage – Powder or performs should be stored at 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.

DATA RANGES

The data contained herein may be reported as a typical value and/or range values based on actual test data and are verified on a periodic basis.

Disclaimer

Note

The information provided in this Technical Data Sheet (TDS) including the recommendation for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have various different applications as well as differing application and working conditions in your environment that are beyond our control. Hysol Huawei is, therefore, 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.

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