

**PRODUCT DESCRIPTION**

Hysol MG33F-0661 is an environmentally friendly "green" (no bromine/antimony or phosphorous) molding compound. It has been designed especially for use in high volume molding of tantalum capacitors. It has been formulated to give optimum overall performance with low moisture absorption, excellent moldability, fast cycle time (especially for automold equipment) and laser mark capability.

PROPERTIES OF UNCURED MATERIAL

Color	Gold
Filler Content, %	72
Spiral Flow, inches @ 177°C	27
Hot Plate Gel Time@177°C, seconds	15
Gel Time, seconds @ 175°C	22
Hot Hardness, Shore-D@175°Cx90sec	85
Shelf Life @ 5°C, months	6
Flash length, mm	
0.25mil	1.0
0.50mil	1.0
1.00mil	1.0
2.00mil	4

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	164
Coefficient of Thermal Expansion, cm/cm/°C	
80-100°C, x 10 ⁻⁶	18
220-240°C, x 10 ⁻⁶	60
Specific gravity	1.81
Flexural Strength, kgf/mm ² (25°C)	20
Flexural Modulus, kgf/mm ² (25°C)	2200
Molded Shrinkage, as molded, %	0.28
Thermal Conductivity, W/m.K	0.8
Water Absorption,	
85°C/85% RH, 168 hours, %	0.42
UL94 Flammability @ 1/8"	V-0
Dielectric Strength, volts/mil	940
Dielectric Constant	
1,000 Hz	4.1
100,000 Hz	4.0
Dissipation Factor	
1,000 Hz	0.004
100,000 Hz	0.010
Volume Resistivity @ 500 volts,	
ohm/cm x 10 ¹⁶	2.6
Surface Resistivity @ 500 volts,	
ohm/cm x 10 ¹⁶	5
Arc Resistance, seconds	185

HANDLING

MG33F-0661 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	80-90
Molding Temperature, °C	170-190
Transfer Pressure, Kg/cm ²	40-80
Transfer Time, sec.	5-10
In-mold cure Time, sec.	60-90
PMC Temperature, °C	175
PMC Time,@175 °C, hrs.	2-6

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.

Note

The information provided in this Technical Data Sheet (TDS) including the recommendations 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 a variety of 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.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

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