



MG33F-0659

May 2018

PRODUCT DESCRIPTION

MG33F-0659 provides the following product characteristics:

Technology	Epoxy
Appearance	Black
Cure	Heat cure
Product Benefits	<ul style="list-style-type: none"> • Green product • Low moisture absorption • High moldability • Fast cycle time
Filler Weight, %	76
Typical Package Application	Tantalum capacitor
Application	Molding compound
Flammability	94 V-0

MG33F-0659 is an environmentally friendly "green" molding compound contains no bromine, antimony or phosphorus flame retardant. MG33F-0659 molding compound was developed specifically for the encapsulation of tantalum capacitors in automold applications.

MG33F-0659 meets UL 94 V-0 Flammability at 6.35mm thickness.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Gel Time @ 175 °C, seconds	14
Spiral Flow, @ 175°C, cm	66.04
Shelf Life:	
@ 5°C, months	7
Hot Hardness, Shore-D @ 175°C, 90 seconds	85

TYPICAL PROCESS DATA

Handling

Preheat Temperature, °C	80 to 95
Molding Temperature, °C	140 to 180
Transfer Pressure, Kg/cm ²	40 to 85
Transfer Time, seconds	6 to 15
Curing Time, 3 mm section:	
Conventional mold:	
@ 175°C, seconds	70 to 90
Automold:	
@ 175°C, seconds	50 to 70
Post Cure @ 175°C, hours	2 to 6

MG33F-0659 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 25 °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 at 175 °C, unless otherwise specified.

Physical Properties:

Coefficient of Thermal Expansion, cm/°C:	
Below Tg	18×10 ⁻⁶
Above Tg	60×10 ⁻⁶
Glass Transition Temperature, °C	175
Specific Gravity	1.83
Molded shrinkage, as molded, %	0.16
Flexural Strength Kg/mm ² :	
@ 25 °C	14
Flexural Modulus Kg/mm ² :	
@ 25 °C	1,500
Thermal Conductivity, W/mk	0.7
Moisture Absorption, %:	
168 hours @ 85°C/85% RH	0.45

Electrical Properties:

Volume Resistivity, ohms-cm, 500 volts:	
@ 25°C	3×10 ¹⁵

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 other strong oxidizing materials.

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.

Powder Storage - Powder or preforms should be stored at -18 °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. Henkel Corporation 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.
