

# LOCTITE HYSOL MG 40FS-AM

June 2012

## PRODUCT DESCRIPTION

LOCTITE HYSOL MG 40FS-AM provides the following product characteristics:

|                                    |                                                                     |
|------------------------------------|---------------------------------------------------------------------|
| <b>Technology</b>                  | Epoxy                                                               |
| <b>Appearance</b>                  | Black                                                               |
| <b>Cure</b>                        | Heat cure                                                           |
| <b>Product Benefits</b>            | <ul style="list-style-type: none"> <li>High productivity</li> </ul> |
| <b>Filler Weight, %</b>            | 72                                                                  |
| <b>Filler Type</b>                 | Silica                                                              |
| <b>Typical Package Application</b> | PDIP, SOIC and Power discrete                                       |
| <b>Application</b>                 | Molding compound                                                    |
| <b>Flammability</b>                | 94 V0                                                               |

LOCTITE HYSOL MG 40FS-AM epoxy molding compound delivers outstanding performance and ease of use.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

|                            |      |
|----------------------------|------|
| Gel Time @ 175 °C, seconds | 24   |
| Spiral Flow, @ 175°C, inch | 38   |
| Specific Gravity           | 1.81 |
| Shelf Life @ 5°C, days     | 365  |

## TYPICAL PROCESS DATA

### Handling

|                                                |            |
|------------------------------------------------|------------|
| Preheat Temperature, °C                        | 75 to 95   |
| Molding Temperature, °C                        | 175 to 200 |
| Transfer Pressure, Kg/cm <sup>2</sup>          | 40 to 85   |
| Transfer Time, seconds                         | 8 to 10    |
| Curing Time, 3 mm section:<br>@ 177°C, seconds | 60 to 75   |

LOCTITE HYSOL MG 40FS-AM 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 Linear Thermal Expansion, TMA: |                                         |
| Below Tg, ppm/°C                              | 20                                      |
| Above Tg, ppm/°C                              | 66                                      |
| Glass Transition Temperature, °C              | 162                                     |
| Flexural strength @ 25°C                      | N/mm <sup>2</sup> 130<br>(psi) (19,000) |

|                                                 |                                               |
|-------------------------------------------------|-----------------------------------------------|
| Flexural modulus @ 25°C                         | N/mm <sup>2</sup> 15,000<br>(psi) (2,175,566) |
| Hot Hardness, Shore D, cured 90 seconds @ 175°C | 85                                            |

## 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 below -20°C or greater than 30°C can adversely affect product properties.**

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 your local Technical Service Center or Customer Service Representative.

### Conversions

(°C x 1.8) + 32 = °F  
 kV/mm x 25.4 = V/mil  
 mm / 25.4 = inches  
 N x 0.225 = lb  
 N/mm x 5.71 = lb/in  
 N/mm<sup>2</sup> x 145 = psi  
 MPa x 145 = psi  
 N·m x 8.851 = lb·in  
 N·m x 0.738 = lb·ft  
 N·mm x 0.142 = oz·in  
 mPa·s = cP

### 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 knowledge and experience of the product as at the date of this TDS. The product can have a

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Reference 0.2