

LOCTITE HYSOL GR 360A-ST-1

July 2012

PRODUCT DESCRIPTION

LOCTITE HYSOL GR 360A-ST-1 provides the following product characteristics:

Technology	Epoxy
Appearance	Black
Cure	Heat cure
Product Benefits	• Green product • High moldability • Low stress • High adhesion • Low moisture absorption • Excellent solder reflow resistance • Low cost of ownership
Filler Weight, %	75.5
Filler Type	Silica
Typical Package Application	DIP
Application	Molding compound
Flammability	94 V-0

LOCTITE HYSOL GR 360A-ST-1 is an environmentally friendly, "green" molding compound, containing no bromine, antimony or phosphorus flame retardant. It offers much improved JEDEC performance as well as moldability property.

LOCTITE HYSOL GR 360A-ST-1 meets UL 94 V-0 Flammability at 6.35mm thickness.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Gel Time @ 175 °C, seconds	17
Spiral Flow, @ 175°C, inch	33
Specific Gravity	1.82
Shelf Life @ 5°C, months	6

TYPICAL PROCESS DATA

Handling

Preheat Temperature, °C	80 to 100
Molding Temperature, °C	150 to 195
Transfer Pressure, Kg/cm ²	40 to 100
Transfer Time, seconds	10 to 20
Curing Time, 3 mm section: @ 175°C, seconds	40 to 90

LOCTITE HYSOL GR 360A-ST-1 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 other wise specified.

Physical Properties:

Coefficient of Linear Thermal Expansion, TMA:	
Below Tg, ppm/°C	14
Above Tg, ppm/°C	63
Glass Transition Temperature, °C	165
Flexural strength @ 25°C	N/mm ² 133 (psi) (19,285)
Flexural modulus @ 25°C	N/mm ² 14,800 (psi) (2,146,000)
Hot Hardness, Shore D, cured 90 seconds @ 180°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

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\text{N} \times 0.225 = \text{lb}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{N/mm}^2 \times 145 = \text{psi}$
 $\text{MPa} \times 145 = \text{psi}$
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$
 $\text{mPa}\cdot\text{s} = \text{cP}$

Note

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose

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Reference 0.1