

LOCTITE HYSOL KL-G 900HP

April 2016

PRODUCT DESCRIPTION

LOCTITE HYSOL KL-G 900HP provides the following product characteristics:

Technology	Epoxy
Appearance	Black
Cure	Heat cure
Product Benefits	• Green product • Low wire sweep molding • Low warpage
Filler Type	Fused or Spherical
Filler Weight, %	88.5
Typical Package Application	QFN
Application	Molding compound
Flammability Rating	UL 94 V0
Surface Finish	PPF

LOCTITE HYSOL KL-G 900HP epoxy molding compound contains no bromine, antimony or phosphorus flame retardant. This material is designed to achieve JEDEC Level 1 requirements, at 260°C reflow temperature. LOCTITE HYSOL KL-G 900HP offers enhanced reliability performance for large QFN packages.

LOCTITE HYSOL KL-G 900HP meets UL 94 V-0 Flammability at 3.175mm thickness.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Gel Time @ 175 °C, seconds	24
Spiral Flow, @ 175°C, cm	82
Shelf Life @ 5 °C, days	180

TYPICAL PROCESS DATA

Handling

Preheat Temperature:	
Conventional mold, °C	70 to 100
Automold, seconds	0 to 5
Molding Temperature, °C	
	150 to 195
Molding Pressure, Kg/cm²	
	40 to 100
Transfer Time:	
Conventional mold, seconds	8 to 15
Automold, seconds	5 to 10
Curing Time, @ 175°C :	
Conventional mold, seconds	80 to 150
Automold, seconds	70 to 120
Post Cure @ 175°C, hours	
	2 to 6

LOCTITE HYSOL KL-G 900HP 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 , ppm/°C:	
Below Tg	9
Above Tg	34
Glass Transition Temperature, °C	
	100
Specific Gravity	
	1.99
Molded shrinkage, as molded, %	
	0.03
Flexural Strength @ 25 °C, Kg/mm²	
	14
Flexural Modulus @ 25 °C, Kg/mm²	
	2,560
Moisture Absorption, %:	
168 hours @ 85°C/85% RH	0.18

TYPICAL PERFORMANCE OF CURED MATERIAL

Adhesive Properties

Shear Strength

Die Shear Strength After MSL 3/260°C, N:	
On PPF	203

GENERAL INFORMATION

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

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.

Mold Compound materials 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.

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

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\text{N} \times 0.225 = \text{lb}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{psi} \times 145 = \text{N/mm}^2$
 $\text{MPa} = \text{N/mm}^2$

N·m x 8.851 = lb·in
N·m x 0.738 = lb·ft
N·mm x 0.142 = oz·in
mPa·s = cP

Office.

Reference 1

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 variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel 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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Americas
+1.888.943.6535

Europe
+32.1457.5611

Asia
+86.21.3898.4800

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