

LOCTITE ABLESTIK G757HF-D

November 2016

PRODUCT DESCRIPTION

LOCTITE ABLESTIK G757HF-D provides the following product characteristics:

Technology	Epoxy
Appearance	gray
Product Benefits	<ul style="list-style-type: none"> • One component • Flexible • Good adhesion strength • Process ease • Thixotropic • Low halogen content (total Cl & Br <1500 ppm)
Cure	Heat cure
Application	Assembly
Operating Temperature	-40 to +140 °C
Typical Assembly Applications	Ferrite core , Reflectors, SMT type transformer modules and Automobile headlamp lenses
Key Substrates	Glass, Ferrite, Iron, Copper, Aluminum and FRP

LOCTITE ABLESTIK G757HF-D epoxy-based adhesive is designed for use in bonding electronic and magnetic components to a wide variety of substrates. Flexibility is a key characteristic of this material, enabling stress absorption and providing extra protection from cracking for ferrite cores of transformers and other bonded components. LOCTITE ABLESTIK G757HF-D is specifically formulated with low halogen content for electronic part manufacturers concerned with environmental sustainability.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Density, g/cm ³	1.15
Sag Resistance (45° angle), mm:	
@ 25°C	1.8
@ 150°C	3.0
Viscosity @ 25 °C, mPa·s (cP):	
Speed 0.5 rpm	275,000
Shelf Life @ 0°C, months	6
Pot life@ 25°C, minimum, month: (Time to increase 50 % of viscosity)	1
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Cure Schedule

- 45 minutes @ 140°C
- 20 minutes @ 160°C or
- 10 minutes @ 180°C or

Post Cure

2 to 4 hours at the highest expected use temperature

This product generates high heat during cure. No adverse exotherm effects are obtained when cured in bond thicknesses less than or about 0.125 inches (3.2 mm).

The above cure profiles are guideline recommendations. Cure conditions (time and temperature) may vary based on customers' experience and their application requirements, as well as customer curing equipment, oven loading and actual oven temperatures.

TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties :

Hardness, :	
Shore D @ 25°C	42
Shore A @ 25°C	85
Coefficient of Thermal Expansion , TMA:	
Below Tg, μm/m°C	151.6
Above Tg, μm/m°C	215.1
Glass Transition Temperature, DMA, °C	130.2
Tensile Modulus, DMA, :	
@ 25 °C	N/mm ² 190 (psi) (27,150)
Linear Shrinkage, ASTM D2566,, %	0.92

Electrical Properties:

Volume Resistivity, ASTM D257, ohms-cm	1.2×10 ¹⁸
Surface Resistivity, ASTM D257, ohms	1.1×10 ¹⁸
Dissipation Factor, (D), ASTM D150:	
@ 1 KHz	0.039
@ 10 KHz	0.035
@ 100 KHz	0.048
Dielectric Constant , (K), ASTM D150:	
@ 1 KHz	4.08
@ 10 KHz	5.22
@ 100 KHz	4.93

TYPICAL PERFORMANCE OF CURED MATERIAL

Lap Shear Strength :

Al to Al	N/mm ² 11.5 (psi) (1,670)
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GENERAL INFORMATION

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

STORAGE:

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage: 0°C. Storage greater than or below 0°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

$$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$$

$$\text{kV/mm} \times 25.4 = \text{V/mil}$$

$$\text{mm} / 25.4 = \text{inches}$$

$$\text{N} \times 0.225 = \text{lb}$$

$$\text{N/mm} \times 5.71 = \text{lb/in}$$

$$\text{psi} \times 145 = \text{N/mm}^2$$

$$\text{MPa} = \text{N/mm}^2$$

$$\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$$

$$\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$$

$$\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$$

$$\text{mPa}\cdot\text{s} = \text{cP}$$

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