

LOCTITE ABLESTIK 56C CAT 9

October 2014

PRODUCT DESCRIPTION

LOCTITE ABLESTIK 56C CAT 9 provides the following product characteristics:

Technology	Epoxy
Appearance	Silver
Filler Type	Silver
Components	Two component - requires mixing
Mix Ratio, by weight - Resin : Hardener	100 : 2.5
Product Benefits	- Electrically conductive - Low temperature cure - High bond strength - Low electrical resistance - No-flow characteristics - Two component - Long shelf life at room temperature
Cure	Heat Cure
Application	Assembly
Operating Temperature	-60 to 120 °C
Surfaces	Metals, Glass, Ceramics and Plastics

LOCTITE ABLESTIK 56C CAT 9 adhesive is designed to make electrical connections where hot soldering is impractical or to make electrical connections to conductive plastics at locations which cannot be subjected to high temperatures.

LOCTITE ABLESTIK 56C CAT 9 passes NASA outgassing standards.

LOCTITE ABLESTIK 56C CAT 9 can be used with a variety of catalysts. For more information on mixed properties when used with other available catalysts, please contact your local technical service representative for assistance and recommendations.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Density , g/cm ³	3.15
Shelf Life @ 18 to 25°C, days	365
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Cure Schedule

2 hours @ 50°C

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

Glass Transition Temperature (Tg), °C	80
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Coefficient of Thermal Expansion , TMA, 10⁻⁶ K⁻¹:

Below Tg	32
Above Tg	120

Extractable Ionic Content , ppm:

Sodium (Na+)	1
Ammonia (NH4+)	10
Potassium (K+)	1
Chloride (Cl-)	1

Thermal Conductivity , W/(m-K)

Flexural strength , ASTM D790	N/mm ² 75	(psi) (10,877)
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Electrical Properties

Volume Resistivity, ohm-cm	4 x 10 ⁻⁴
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Outgassing Properties

Total Mass Loss, %	0.23
Collected Volatile Condensable Material, %	0.01

TYPICAL PERFORMANCE OF CURED MATERIAL

Shear Strength

Tensile Strength	N/mm ² 6	(psi) (870)
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GENERAL INFORMATION

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

DIRECTIONS FOR USE

- Complete cleaning of the substrates should be performed to remove contamination such as oxide layers, dust, moisture, salt and oils which can cause poor adhesion or corrosion in a bonded part.
- Apply adhesive to surface to be bonded.
- No pressure is required.
- Thinning of LOCTITE ABLESTIK 56C CAT 9 with a small amount of Toluene (10% by weight maximum) can be used where a thin film is applied. Solvent must be evaporated to assure low resistance. The solvent can be added to the catalyst for ease of use..

Storage

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

Optimal Storage : 18 to 25 °C

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.

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.

Conversions

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

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Reference 0.9

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Americas
+1.888.943.6535

Europe
+32.1457.5611

Asia
+86.21.3898.4800

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