

LOCTITE ABLESTIK 56C CAT 11

May 2019

PRODUCT DESCRIPTION

LOCTITE ABLESTIK 56C CAT 11 provides the following product characteristics:

Technology	Epoxy
Appearance	Silver
Filler Type	Silver
Components	Two components - requires mixing
Mix Ratio, (by weight) Resin : Hardener	100 : 3.5
Product Benefits	- Electrically conductive - Low temperature cure - High bond strength - Low electrical resistance - No-flow characteristics - Two component - Long shelf life at room temperature - Passes NASA outgassing
Cure	Heat Cure
Application	Assembly
Operating Temperature	-60 to 175 °C
Surfaces	Metals, Glass, Ceramics and Plastics

LOCTITE ABLESTIK 56C CAT 11 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 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.

LOCTITE ABLESTIK 56C CAT 11 passes NASA outgassing standards.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Density, g/cm ³	3.45
Shelf Life @ 18 to 25°C, days	365
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Cure Schedule

8 hours @ 80°C

1 hour @ 120°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

Coefficient of Thermal Expansion, TMA, 10 ⁻⁶ K ⁻¹ :	
Below Tg	32
Above Tg	120
Glass Transition Temperature(Tg), °C	80
Extractable Ionic Content, :	
Sodium (Na+)	1
Ammonia (NH3+)	10
Potassium (K+)	1
Chloride (Cl-)	1
Thermal Conductivity, W/(m-K)	3.0
Flexural strength, ASTM D790	N/mm ² 75 (psi) (10,877)

Electrical Properties

Volume Resistivity @ 25°C, ohm-cm	0.0002
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TYPICAL PERFORMANCE OF CURED MATERIAL

Lap Shear Strength :	
Aluminum @ 25 °C	N/mm ² 5.5 (psi) (800)

GENERAL INFORMATION

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

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.
- Some separation of components is common during shipping and storage. For this reason, it is recommended that the contents of the shipping container be thoroughly mixed prior to use.
- Accurately weigh LOCTITE ABLESTIK 56C and LOCTITE CAT 11 into a clean container in the recommended ratio.
- Blend components with spatula (2 to 3 minutes) and scrape the bottom and sides of the mixing container frequently to produce a uniform mixture.
- Apply adhesive to all surfaces to be bonded and join together.
- In most applications only contact pressure is required.

STORAGE:

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

Optimal Storage : 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

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

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

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

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

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

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

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

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

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

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

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

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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Reference 0.10