

LOCTITE ABLESTIK 967-1

October 2014

PRODUCT DESCRIPTION

LOCTITE ABLESTIK 967-1 provides the following product characteristics:

Technology	Epoxy
Appearance	Silver
Components	Two component - requires mixing
Mix Ratio - Part A:Part B	1 : 1
Cure	Heat cure
Product Benefits	- Electrically conductive - Two component - Both components silver-filled - Low temperature cure
Application	Die attach
Filler Type	Silver

LOCTITE ABLESTIK 967-1 adhesive is designed for applications which require lower-than-normal cure temperatures. It is ideal for application by automatic dispenser, screen printing, or hand probe.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield CP51, 25 °C, mPa-s (cP):	
Speed 5 rpm	14,000
Shelf Life (from date of manufacture):	
In kits @ 25°C, days	183
Premixed & Frozen @ -40°C, days	365

TYPICAL CURING PERFORMANCE

Cure Schedule

6 hours @ 65°C

Alternative Cure Schedule 1

2 hours @ 80°C

Alternative Cure Schedule 2

30 minutes @ 120°C

Alternative Cure Schedule 3

15 minutes @ 150°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) by TMA, °C:	
Cured at the Recommended Cure Schedule	75
Cured at the Alternative Cure Schedule 1	110
Cured at the Alternative Cure Schedule 2	135
Cured at the Alternative Cure Schedule 3	145

Extractable Ionic Content, @ 100°C ppm:

Chloride (Cl-)	75
Sodium (Na+)	5
Potassium (K+)	N/D
Weight Loss @ 300°C, %	0.52

Electrical Properties

Volume Resistivity, ohms-cm:

Cured at the Recommended Cure Schedule	0.015
Cured at the Alternative Cure Schedule 1	0.002
Cured at the Alternative Cure Schedule 2	0.0005
Cured at the Alternative Cure Schedule 3	0.0002

TYPICAL PERFORMANCE OF CURED MATERIAL

Miscellaneous

Die Shear Strength, psi:

2 X 2 mm die, ,

Cured at the Recommended Cure Schedule

Substrate	@25°C
Au to Au	3300

Cured at the Alternative Cure Schedule 1

Substrate	@25°C
Au to Au	4900

Cured at the Alternative Cure Schedule 2

Substrate	@25°C
Au to Au	4350

Cured at the Alternative Cure Schedule 3

Substrate	@25°C
Au to Au	4400

Lap Shear Strength, psi:

Substrate	@25°C
Al to Al	1200

GENERAL INFORMATION

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

THAWING:

1. Allow container to reach room temperature before use.
2. DO NOT open the container before contents reach 25°C temperature. Any moisture that collects on the thawed container should be removed prior to opening the container.
3. DO NOT re-freeze. Once thawed, the adhesive should not be re-frozen.

DIRECTIONS FOR USE

1. Mix component thoroughly before use.
2. For 2-part kits, blend equal weights of Parts A and B (1:1 ratio) thoroughly.
3. Scrape the sidewall and bottom of container repeatedly during mixing.
4. To ensure the absence of unmixed adhesive, transfer contents to a secondary, empty container and mix for an additional minute.
5. Apply adhesive as required.
6. Assemble bonds.
7. Cure at one of the recommended cure schedules.

AVAILABILITY

1. Two component LOCTITE ABLESTIK 967-1 adhesive is available in a variety of sizes, ranging from 1ounce to 1pound.
2. This adhesive is also available premixed and frozen in disposable syringes ranging in size from 1cc to 10cc.

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.

Storage life of 2-component kits at room temperature (25°C max) is 6 months. At standard refrigeration temperature (5°C max), storage life is 1 year.

Storage life of premixed and frozen is 1 year at -40°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.

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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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

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Reference 0.1