

# LOCTITE ABLESTIK 967-1

October 2014

## PRODUCT DESCRIPTION

LOCTITE ABLESTIK 967-1 provides the following product characteristics:

|                                  |   |
|----------------------------------|---|
| <b>Technology</b>                | Epoxy   |
| <b>Appearance</b>                | Silver  |
| <b>Components</b>                | Two component - requires mixing   |
| <b>Mix Ratio - Part A:Part B</b> | 1 : 1   |
| <b>Cure</b>                      | Heat cure   |
| <b>Product Benefits</b>          | <ul style="list-style-type: none"> <li>Electrically conductive</li> <li>Two component</li> <li>Both components silver-filled</li> <li>Low temperature cure</li> </ul> |
| <b>Application</b>               | Die attach  |
| <b>Filler Type</b>               | 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**

(°C x 1.8) + 32 = °F  
 kV/mm x 25.4 = V/mil  
 mm / 25.4 = inches  
 N x 0.225 = lb  
 N/mm x 5.71 = lb/in  
 N/mm<sup>2</sup> x 145 = psi  
 MPa = N/mm<sup>2</sup>  
 MPa x 145 = psi  
 N·m x 8.851 = lb·in  
 N·m x 0.738 = lb·ft  
 N·mm x 0.142 = oz·in  
 mPa·s = 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