

LOCTITE ABLESTIK 976-1

May 2020

PRODUCT DESCRIPTION

LOCTITE ABLESTIK 976-1 provides the following product characteristics:

| | |
|-------------------------|--|
| Technology | Epoxy |
| Appearance | Silver |
| Cure | Heat cure |
| Product Benefits | <ul style="list-style-type: none">• Flexible• Electrically conductive |
| Application | Electronic Material and Component assembly |

LOCTITE ABLESTIK 976-1 is designed for use on non-rigid substrates for circuitry formation and component attachment. This material can be applied by automatic dispenser, screen printing or hand probe. LOCTITE ABLESTIK 976-1 is available premixed and frozen or as a two component system with a simple 1:1 mix ratio. However, LOCTITE ABLESTIK 976-1 is not recommended for use in high humidity environments.

TYPICAL PROPERTIES OF UNCURED MATERIAL

| | |
|--|-------|
| Viscosity, Brookfield CP51, 25 °C, mPa·s (cP): | |
| @ Speed 5 rpm | 9,000 |
| Work Life @ 25°C, (25% increase in viscosity), hours | 8 |
| Storage Life : | |
| Premixed kits @ -40°C, days | 365 |
| Two-Part kit @ 25°C, days | 365 |
| Flash Point - See SDS | |

TYPICAL CURING PERFORMANCE**Recommended Cure**

2 hours @ 125°C

Alternate Cure

4 hours @ 100°C or

1 hour @ 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, TMA, °C | 66 |
| Coefficient of Thermal Expansion, TMA, ppm/°C: | |
| Below Tg | 73 |
| Above Tg | 390 |
| Thermal Conductivity, W/(m·K) | 2.1 |
| Weight Loss @ 300°C, % | 0.2 |

Electrical Properties

| | |
|----------------------------|--------|
| Volume Resistivity, ohm-cm | 0.0002 |
|----------------------------|--------|

TYPICAL PERFORMANCE OF CURED MATERIAL

Lap Shear Strength @ 25°C:

| | | |
|----------|-------------------|-------|
| Al to Al | N/mm ² | 5.17 |
| | (psi) | (750) |

GENERAL INFORMATION

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

THAWING:

1. If premixed and frozen, thaw adhesive to room temperature.
2. Apply adhesive as required.
3. Assemble bonds.
4. Place in a preheated oven and cure at the recommended cure schedule.

DIRECTIONS FOR USE

1. If kit, mix part A and part B in 1:1 ratio.
2. Mix for approximately one minute or until uniformly blended.
3. Apply adhesive as required.
4. Assemble bonds.
5. Place in pre-heated oven and cure at the recommended cure schedule.

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.

Optimal Storage: LOCTITE ABLESTIK 976-1 adhesive packaged in kits may be stored at 25°C for up to one year. Premixed and frozen adhesive must be continually stored 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

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

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Reference 1