

# LOCTITE ABLESTIK 958-11

April 2014

## PRODUCT DESCRIPTION

LOCTITE ABLESTIK 958-11 provides the following product characteristics:

<b>Technology</b>	Epoxy
<b>Appearance</b>	white
<b>Cure</b>	Heat cure
<b>Product Benefits</b>	<ul style="list-style-type: none"> <li>• Non-conductive</li> <li>• Stress absorbing</li> </ul>
<b>Application</b>	Die attach
<b>pH</b>	4 to 9

LOCTITE ABLESTIK 958-11 adhesive is designed to absorb stresses produced when bonding large ICs.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity @ 25 °C, mPa·s (cP)	45,000
Work Life @ 25°C, days	14
Shelf Life @ -40°C (from date of manufacture), days	365
Flash Point - See SDS	

## TYPICAL CURING PERFORMANCE

### Cure Schedule

2 hours @ 130°C

### Alternative Cure Schedule 1

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

Coefficient of Thermal Expansion, :	
Below Tg, ppm/°C	15
Above Tg, ppm/°C	45
Glass Transition Temperature (Tg) by TMA, °C	89
Extractable Ionic Content, :	
Chloride (Cl-)	<300
Sodium (Na+)	<50
Potassium (K+)	<50
Water Extract Conductivity, µmhos/cm	43
Weight Loss @ 200°C, %	<1.0

### Electrical Properties

Volume Resistivity, ohms-cm	5×10 <sup>14</sup>
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## TYPICAL PERFORMANCE OF CURED MATERIAL

Die Shear Strength @ 25°C: 2 X 2 mm , Ceramic to Au, kg-f	>25
Lap Shear Strength , Al to Al: @ 25°C	N/mm <sup>2</sup> 18 (psi) (>2,700)

## GENERAL INFORMATION

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

## THAWING:

1. Allow container to reach room temperature before use.
2. After removing from the freezer, set the syringes to stand vertically while thawing.
3. 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.
4. DO NOT re-freeze. Once thawed to -40°C, the adhesive should not be re-frozen.

## DIRECTIONS FOR USE

1. Thawed material should immediately be placed on dispense equipment for use.
2. If the adhesive is transferred to a final dispensing reservoir, care must be exercised to avoid entrapment of contaminants and/or air into the adhesive.
3. Adhesive must be completely used within the product's recommended work life.

## 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: -40 °C. Storage below minus (-)40 °C or greater than minus (-)40 °C can adversely affect product properties.**

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

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