

LOCTITE ABLESTIK 789-3TN1

March 2022

PRODUCT DESCRIPTION

LOCTITE ABLESTIK 789-3TN1 provides the following product characteristics:

Technology	Epoxy
Appearance	Blue
Cure	Heat cure
Application	Moisture Resistant Adhesive
Product Benefits	<ul style="list-style-type: none">• One component• High strength• Moisture resistant• Strong adhesion to difficult to bond metals
Substrates	Gold, Silver and Copper

LOCTITE ABLESTIK 789-3TN1 one component, high strength adhesive is designed for applications which require good moisture resistance. This adhesive exhibits strong adhesion to difficult-to-bond metals and retains its bond strength after exposure to moisture.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity @ 25 °C, mPa·s (cP) 37,000
Shelf Life @ -40°C (from date of manufacture), 365 days
Flash Point - See SDS

TYPICAL CURING PERFORMANCE

Recommended Curing Conditions
30 minutes @ 150°C

Alternative Curing Conditions

1 hour @ 125°C

The above cure profiles are guideline recommendations. Cure conditions (time and temperature) may vary based on customers' experience and specific application requirements, as well as customer curing equipment, oven loading and actual oven temperatures.

TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties

Glass Transition Temperature (T_g), °C 126
Coefficient of Thermal Expansion, TMA, cm/cm/°C:
Below T_g 6.30×10⁻⁰⁵
Above T_g 1.40×10⁻⁰⁴

Weight Loss @ 250°C, TGA, % 0.28

Thermal Conductivity @ 121°C, W/(m·K) 0.29

Electrical Properties

Volume Resistivity, ohm-cm 2×10¹⁴
Dielectric Strength, kV/mm 31.5
Dielectric Constant / Dissipation Factor:
@ 1KHz 4.2/0.011

TYPICAL PERFORMANCE OF CURED MATERIAL

Lap Shear Strength @ 25°C:

Al to Al N/mm² 34.5
(psi) (5,000)

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 25°C, the adhesive should not be re-frozen.

Directions for Use

1. Apply adhesive as required.
2. Assemble bonds.
3. Cure at one of the recommended cure schedules.

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 -40°C or above -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 Henkel Representative.

Conversions

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

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local Henkel representative for assistance and recommendations on the specifications of this product.

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