

# LOCTITE ABLESTIK 570

April 2014

#### PRODUCT DESCRIPTION

LOCTITE ABLESTIK 570 provides the following product characteristics:

Technology	Epoxy Film	
Appearance	White	
Cure	Heat cure	
Product Benefits	Thermally conductive	
	High purity	
Application	Assembly	
Carrier Type	Glass fabric	

LOCTITE ABLESTIK 570 is designed for substrate attach.

#### MIL-STD-883C

LOCTITE ABLESTIK 570 meets the requirements of MIL-STD-883C, Method 5011.

#### TYPICAL PROPERTIES OF UNCURED MATERIAL

Work Life @ 25°C, days 14	
Shelf Life:	
@ 5°C, days 91	
@ -10°C, days 183	
@ -40°C, days 365	

#### TYPICAL CURING PERFORMANCE

Cure Schedule

3 hours @ 150°C

#### Alternative Cure Schedule

1.5 hours @ 170°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, TMA:	
Below Tg, ppm/°C	85
Above Tg, ppm/°C	45
Glass Transition Temperature (Tg), °C	140
Weight Loss @ 300°C, %	0.3
Thermal Conductivity @ 121°C, W/(m-K)	0.28
рН	7.0
Water Extract Conductivity, µmhos/cm	40
Extractable Ionic Content, ppm:	
Chloride (Cl-)	25
Sodium (Na+)	20
Potassium (K+)	ND

#### Electrical Properties

Volume Resistivity, ohm-cm	7.9×10 <sup>14</sup>
Dielectric Constant/Dissipation Factor @ 1KHz	3.57/0.003

#### TYPICAL PERFORMANCE OF CURED MATERIAL

#### Shear Strength

Lap Shear Strength	
AI to AI @ 25°C	N/mm <sup>2</sup> 24.83
	(psi) (3,600)
Au to Au @ 25°C	N/mm <sup>2</sup> 24.83
	(psi) (3,600)

#### 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.
- 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. Place precut adhesive film between clean surfaces to be bonded.
- 2. Assemble components.
- 3. Apply spring loaded clamp or dead weight to provide continuous pressure of at least 10 psi during cure cycle.
- 4. Place assembly in a preheated oven and cure at the recommended cure schedule.

#### AVAILABILITY

- 1. LOCTITE ABLESTIK 570 adhesive is available in sheet stock or die cut preforms.
- 2. LOCTITE ABLESTIK 570 adhesive can be die cut to customer specifications.

#### 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.



Reference 0.1

#### Conversions

 $(^{\circ}C x 1.8) + 32 = ^{\circ}F$ 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

#### Disclaimer

#### Note:

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 of our product for the production processes and conditions and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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