

LOCTITE ABLESTIK 550T

April 2014

PRODUCT DESCRIPTION

LOCTITE ABLESTIK 550T provides the following product characteristics:

Technology	Epoxy Film
Appearance	Translucent
Cure	Heat cure
Product Benefits	<ul style="list-style-type: none">• Moisture resistant• Excellent adhesion
Application	Adhesive Film
Carrier Type	Glass fabric
Surfaces	Gold / Gold-plated and Difficult-to-bond surfaces
Service Temperature	-55 to 150°C

LOCTITE ABLESTIK 550T adhesive film is designed for substrate attach and sealing microelectronic packages. This adhesive exhibits strong adhesion to difficult-to-bond metals and retains its bond strength after exposure to moisture.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Work Life @ 25°C, days	183
Shelf Life:	
@ 25°C, days	183
@ -40°C, days	365
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE**Cure Schedule**

2 hours @ 125°C

Alternate Cure Schedule

30 minutes @ 150°C

Curing film adhesives under pressure to ensure proper wetting of the adherend surfaces is recommended. Pressure requirements will vary from (2 to 200 psi) depending on the severity of the adherends warpage and the stiffness of the adherends. Temperatures are recommended are at the bondline.

TYPICAL PROPERTIES OF CURED MATERIAL**Physical Properties:**

Thermal Conductivity @ 121°C, W/(m-K) 0.2

Electrical Properties:Volume Resistivity, ohms-cm 1×10^{14} **TYPICAL PERFORMANCE OF CURED MATERIAL**

Lap Shear Strength @ 25°C:

Al to Al	N/mm ² 17.93
	(psi) (2,600)

GENERAL INFORMATION

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

THAWING:

1. Allow material to reach room temperature before use.
2. DO NOT open the package before contents reach ambient temperature.
3. Any moisture that collects on the thawed package should be removed prior to opening the package.

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 1 psi during cure cycle.
4. Place assembly in a preheated oven and cure at the recommended cure schedule.

AVAILABILITY

LOCTITE ABLESTIK 550T adhesive is available in sheet stock or die cut preforms dimensioned to customer drawings. This film is supported by 1 mil thick glass fabric. Custom modifications are available at a premium price.

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

ABLEFILM products can be stored at -40°C for up to one year. The shelf life of the film is only valid when the material has been stored at the specified storage conditions. Incorrect storage conditions will degrade the performance of the material in final cured properties. Avoid flexing film when frozen.

Conversions

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

Disclaimer

Note:

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 in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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Reference 0.1