

# LOCTITE ABLESTIK 930-12-4F

October 2014

## PRODUCT DESCRIPTION

LOCTITE ABLESTIK 930-12-4F provides the following product characteristics:

<b>Technology</b>	Epoxy
<b>Appearance</b>	Yellow paste
<b>Cure</b>	Heat cure
<b>Product Benefits</b>	<ul style="list-style-type: none"> <li>• Pin transferable</li> <li>• One component</li> <li>• Fast heat cure</li> <li>• No stringing</li> <li>• Good green strength</li> </ul>
<b>Application</b>	Surface mount adhesive
<b>Operating Temperature Range</b>	-10 to 105°C

LOCTITE ABLESTIK 930-12-4F is non-stringing but has sufficient green strength to prevent component skewing due to board movement or vibration before and during cure. After curing, LOCTITE ABLESTIK 930-12-4F is wave solder resistant and fluoresces under black light to facilitate board inspection.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Brookfield Viscosity , ASTM D2393, mPa·s (cP):

Spindle 6, Speed 10 rpm	80,000
Thixotropic Index	3.6
Density, ASTM D792, g/cm <sup>3</sup>	1.2
Shelf Life @ 25°C (from date of manufacture), days	91
Flash Point - See SDS	

## TYPICAL CURING PERFORMANCE

### Cure Schedule

- 15 minutes @ 100°C or
- 5 minutes @ 120°C or
- 2.5 minutes @ 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

Hardness, Shore D, ASTM D2240	80
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### Electrical Properties

Dielectric Strength, ASTM D149, kV/mm	17.7
Dielectric Constant @ 1 MHz, ASTM D150	3.0
Volume Resistivity, ASTM D257, ohms-cm: @ 25 °C	1×10 <sup>13</sup>

## TYPICAL PERFORMANCE OF CURED MATERIAL

Tensile Lap Shear Strength , ASTM D1002:

Aluminum to aluminum:

@ 25°C

N/mm<sup>2</sup> 7.6  
(psi) (1,100)

## GENERAL INFORMATION

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

## DIRECTIONS FOR USE

1. Complete cleaning of the substrates should be performed to remove contamination such as oxide layers, dust, moisture, salt and oils which can cause poor adhesion or corrosion in a bonded part.
2. LOCTITE ABLESTIK 930-12-4F is designed for use in pin transfer applications with squeegee assist.
3. Some separation of components is common during shipping and storage. For this reason, it is recommended that the contents of the shipping container be thoroughly mixed prior to use.

## Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

## Optimal Storage : 25 °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

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

## Disclaimer

### Note:

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## Reference 0.0