Technical Data Sheet

ABLESTIK 77 2 LTC

October 2014

PRODUCT DESCRIPTION

LOCTITE ABLESTIK 77-2LTC provides the following product characteristics:

Technology	Epoxy
Appearance	blue
Cure	Heat cure
Product Benefits	• Electrically Insulating • Solvent-free • One component • Soft, smooth consistency • No tailing or sagging
Application	Adhesive
Application Method	Screening, Pin transfer or Dot dispense

LOCTITE ABLESTIK 77-2LTC adhesive is designed for attaching surface mounted devices to printed circuit boards prior to wave solder. Small, uniform dots may be dispensed for capacitor and resistor attach
.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity @ 25 °C, mPa·s (cP)	33,000
Work Life @ 25°C, days	3
Shelf Life:	
@ -40ºC, days	365
@ 25ºC, days	3
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Recommended Curing Conditions

30 minutes @ 80°C

Alternative Curing Conditions

15mins @ 100°C or
10mins @ 125°C or
5mins @ 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 TMA:	
Below Tg, ppm/°C	44
Above Tg, ppm/°C	86
Glass Transition Temperature, °C	80
Hardness, Shore D	90
Weight Loss @ 300ºC, %	0.24
Thermal Conductivity @ 121°C, W/(m-K)	0.5
Extractable Ionic Content, ppm:	
Chloride (Cl-)	30
Sodium (Na+)	5
Potassium (K+)	5

Electrical Properties

Volume Resistivity, ohms-cm	2.5×10^{14}
Dielectric Constant @ 1KHz	4.2
Dissipation Factor @ 1KHz	0.0078

TYPICAL PERFORMANCE OF CURED MATERIAL

Shear Strength

Device Shear Strength:		
Ceramic Capacitors, grams		1,000
SOTs, grams		2,000
Thick Film Resistors, grams		3,000
Lap Shear Strength @ 25°C:		
Al to Al	N/mm²	15
	(psi)	(2,300)

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.
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. Thawed adhesive 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.
4. Adhesive may be dispensed in small uniform dots for capacitor and resistor attach.

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

(°C x 1.8) + 32 = °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/mm² x 145 = psi
MPa = N/mm²
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 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