

LOCTITE ABLESTIK CE3850NS

February 2016

PRODUCT DESCRIPTION

LOCTITE ABLESTIK CE3850NS provides the following product characteristics:

Technology	Epoxy
Appearance	Silver
Filler Type	Silver
Product Benefits	<ul style="list-style-type: none"> • One component • Electrically conductive • Long work life • Excellent contact resistance • Fast cure
Cure	Heat cure
Application	Assembly
Typical Package Application	SMD and Component attach
Substrates	Sn, Ni, Organic, Solder and OSP-Cu

LOCTITE ABLESTIK CE3850NS electrically conductive adhesive is designed for circuit assembly applications. It is specifically recommended for mounting low cost tin (Sn) and nickel (Ni) finished components onto conductive trace terminations of printed circuit boards or co-fired ceramic circuitry where it provides low and stable contact resistance. LOCTITE ABLESTIK CE3850NS can be fast cured at 150°C. It is ideal for application by needle dispense.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Thixotropic Index	4
Viscosity @ 15 s ⁻¹ , AR 1000 Rheometer, mPa·s (cP)	20,000
Pot Life @ 18 to 25°C, days	2
Shelf Life @ -40°C, months	9
Flash Point, %	>100

TYPICAL CURING PERFORMANCE

Cure Schedule

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

Coefficient of Thermal Expansion :	
Below Tg, ppm/°C	45
Above Tg, ppm/°C	120
Glass Transition Temperature (Tg), °C	122
Young's modulus (E) :	
@ 25 °C	N/mm ² 11,000 (psi) (1.60×10 ⁶)
@ 150 °C	N/mm ² 500 (psi) (72,500)

Extractable Ionic Content, ppm:

Chloride (Cl ⁻)	10
Sodium (Na ⁺)	10
Weight Loss, %	2

Electrical Properties

Volume Resistivity @ 25°C, ohm-cm	0.0005
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TYPICAL PERFORMANCE OF CURED MATERIAL

Miscellaneous

Die Shear Strength	N/mm ² 50 (psi) (7,250)
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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.

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

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
 psi x 145 = N/mm²
 MPa = N/mm²
 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

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Reference 1

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