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LOCTITE

Technical Data Sheet

LOCTITE ABLESTIK TE 3530

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PRODUCT DESCRIPTION

LOCTITE ABLESTIK TE 3530 provides the following product characteristics:

Technology	Epoxy
Appearance	White
Cure	Heat cure
Product Benefits	• One component • Thermally conductive • Low viscosity • Low temperature cure
Application	Assembly
Typical Package Application	Sensor attach and Die attach
Operating Temperature	150 °C

LOCTITE ABLESTIK TE 3530 adhesive is designed for bonding heat dissipation components and can be applied by automatic syringe dispense. It cures at moderate to low temperatures allowing it to be used on heat sensitive materials.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity @ 25 °C, mPa·s (cP):	
@ 10 s^{-1}	60,000
Specific Gravity	2.7
Hegman Fineness, micron	40
Shelf Life:	
@ -25 to -18ºC, days	182
@ 18 to 25ºC, days	3
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Cure Schedule

30 minutes @ 100°C or
15 minutes @ 120°C or
10 minutes @ 150°C

Cure can be accelerated by using IR cure instead of convection oven cure.

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 , K^{-1}	36×10^{-6}
Glass Transition Temperature (Tg), DMA, °C	55
Thermal Conductivity , W/(m-K)	2.3
Young's Modulus, psi, maximum:	
@ -40 °C	2,900,000
@ -20 °C	2,320,000
@ 0 °C	1,450,000
@ 25°C	681,500
@ 50 °C	217,500
@ 100 °C	43,500
@ 150 °C	29,000
@ 200 °C	26,100
Hardness, Shore D	87

Electrical Properties

Volume Resistivity, ohms-cm	1×10^{15}
Surface Resistivity, ohms	1×10^{14}

TYPICAL PERFORMANCE OF CURED MATERIAL

Tensile Lap Shear Strength:	
On Al, MPa	>8

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.

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 : -25 to -18 °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.

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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

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Reference 0.4