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LOCTITE

Technical Data Sheet

LOCTITE ABLESTIK 2902

October 2014

PRODUCT DESCRIPTION

LOCTITE ABLESTIK 2902 provides the following product characteristics:

Technology	Epoxy
Appearance	Silver
Filler Type	Silver
Cure	Room Temperature or Heat Cure
Components	Two component - requires mixing
Product Benefits	• Electrically conductive • Thermally conductive • Solvent-free • High adhesion • Two component • Room temperature cure • Good adhesion to a variety of substrates
Mix Ratio, by weight - Resin : Hardener	100 : 6
Typical Assembly Applications	Electrical modules, Printed circuitry, Wave guides, Flat cables, High frequency shields and Cold solder
Operating Temperature	-60 to 110 °C
Application	Bonding, Sealing or Repair
Surfaces	Ceramics, Many metals, Glass and Plastic laminates

LOCTITE ABLESTIK 2902 is designed for electronic bonding and sealing applications that require a combination of good mechanical and electrical properties.

LOCTITE ABLESTIK 2902 passes NASA outgassing standards.

ISO-10993-5

LOCTITE ABLESTIK 2902 was tested to and passed the requirements of ISO 10993-5 for Cytotoxicity.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Mixed Viscosity, mPa·s (cP) :	
cp #52, 10 rpm	20,000
Specific Gravity, mixed	3.2
Pot life , minutes	60
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Cure Schedule

24 hours @ 25°C or
1 to 4 hours @ 65°C

The above cure profile is a guideline recommendation. 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, cm/cm/ºC	4.9×10^{-05}
Glass Transition Temperature (Tg), °C	52
Thermal Conductivity , W/(m-K)	2.99×10^{00}
Hardness, Shore D	80

Electrical Properties

Volume Resistivity, ohms-cm:

1 hour @ 110°C	0.0006
15 minutes @ 150ºC	0.0005
2 hours @ 65ºC	0.0009
24 hours @ 25ºC	0.001
5 minutes @ 160ºC	0.0003

Outgassing Properties

Total Mass Loss, %	0.64
Collected Volatile Condensable Material, %	0.05

TYPICAL PERFORMANCE OF CURED MATERIAL

Shear Strength

Lap Shear Strength :

Aluminum:

Cured @ 110 °C for 1 hour	N/mm² (psi)	11 (1,600)
Cured @ 150 °C for 15 minutes	N/mm² (psi)	11 (1,600)
Cured @ 65 °C for 2 hours	N/mm² (psi)	7 (1,000)
Cured @ 25 °C for 24 hours	N/mm² (psi)	5 (700)

GENERAL INFORMATION

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

DIRECTIONS FOR USE

1. Carefully clean and dry all surfaces to be bonded.
2. Remove clamp and thoroughly mix the LOCTITE ABLESTIK 2902 epoxy adhesive system components in the handy BIPAX mixing-dispenser package until color is uniform throughout.
3. Apply this completely mixed adhesive to the prepared surfaces, and gently press these surfaces together. Contact pressure is adequate for strong, reliable bonds; however, maintain contact until adhesive is completely cured.
4. 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.
5. Some ingredients in this formulation provided in BIPAX, TRA-PAX and bulk packaging may crystallize when subjected to low temperature storage. A gentle warming cycle of 52ºC for 30 minutes prior to mixing components may be necessary. Crystallized epoxy components do not react as well as liquid components and should be redissolved prior to use for best results.

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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 : 27 °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:
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