Technical Data Sheet

LOCTITE ABLESTIK 2112 BIPAX

December 2016

PRODUCT DESCRIPTION

LOCTITE ABLESTIK 2112 BIPAX provides the following product characteristics:

Technology	Epoxy
Appearance	Milky, Translucent
Cure	Room Temperature or Heat Cure
Product Benefits	• Two component • Thixotropic • Non-sag • Solvent-free • Good chemical resistance • Good electrical insulation • Provides environmental resistance
Mix Ratio, by weight - Resin : Hardener	100 : 22
Application	Non-conductive adhesive
Operating Temperature	-60 to 125 °C
Surfaces	Metals, Glass, Ceramics, Wood and Plastics

LOCTITE ABLESTIK 2112 BIPAX is recommended for critical electronic, aerospace and industrial bonding, laminating and reinforcing applications.

LOCTITE ABLESTIK 2112 BIPAX is easily mixed and used for staking components to printed circuit boards for enhanced mechanical rigidity, and for bonding, laminating and repair applications.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Mixed Viscosity, Brookfield - RV #7, mPa·s (cP):	
Speed 10 rpm	60,000
Thixotropic Index (1/10 rpm)	6.5
Specific Gravity, mixed	1.2
Pot Life @ 25ºC, minutes	30
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Cure Schedule

24 hours @ 25°C or
4 hours @ 65°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	90
Coefficient of Linear Thermal Expansion, ppm/ºC	55
Glass Transition Temperature (Tg), ultimate, °C	93
Izod Impact Strength, ft-lb/in. of notch	0.75
Reactive solids contents, %	100

Electrical Properties

Dielectric Strength, volts/mil	410
Dielectric Constant / Dissipation Factor @ 25ºC:	
@ 1 KHz	4.6/0.01
Volume Resistivity , ohm-cm:	
@ 25 °C	6×10^{13}
@ 100 °C	6×10^{10}

TYPICAL PROPERTIES OF CURED MATERIAL

Sample cured 2 hours @ 65°C

Shear Strength

Lap Shear Strength:		
Aluminum to aluminum	N/mm²	13
	(psi)	(1,900)

GENERAL INFORMATION

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

DIRECTIONS FOR USE

1. Carefully clean and dry all surfaces to be bonded
2. Remove clamp and thoroughly mix the LOCTITE ABLESTIK 2112 BIPAX 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 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

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:
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.
Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:
In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:
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. 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.
Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Corporation, Resin Technology Group, Inc., or Henkel Canada Corporation, the following disclaimer is applicable:
The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

Reference 1