TU5236

Non-Conductive Stretchable Adhesive

Product Description

TU5236 is a stretchable non-conductive epoxy used to bond components in flexible and stretchable systems and to manage thermal expansion mismatches in rigid packaging solutions. The NCA can be used in concert with ACI's conductive adhesives, TS133X series, to create an effective surface mount attachment on flexible and stretchable substrates. It can be used with traditional deposition processes and cures with low shrinkage. TU5236 exhibits a unique combination of high compliance, high shear strength, and high adhesion to a broad range of materials.

Product Benefits

TU5236 is a filled non-conductive epoxy used to bond components in flexible and stretchable systems and to manage thermal expansion mismatches in rigid packaging solutions. It can be used with high volume dispensing processes, and cures with low shrinkage. The NCA exhibits a unique combination of high compliance, high shear strength, and high adhesion to a broad range of materials.

Typical Performance	
Lap shear strength	> 1,500 kPA
Тд	- 10 °C
Stretch	50%
Typical Properties as Supplied	
Physical State	Paste
Color	Yellow-White
Viscosity ¹	
1 s ⁻¹	37 Pa•s
10 s ⁻¹	12 Pa•s
100 s ⁻¹	8 Pa•s
Density	1.1 g/mL
Percent Solids ²	>97%
Shelf Life at -40°C ³	12 Months
Pot Life	14 - 16 hours
Weight Loss on Cure	<2%
Weight Loss on 300°C TGA	<3%
¹ Measured on Anton Paar MCR302 Rheometer at 10 ⁻¹ sec shear rate at 25°C ² 150°C for 120 min in box oven	

² 150°C for 120 min in box oven

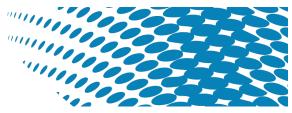
³ Storage at different temperatures can adversely affect properties

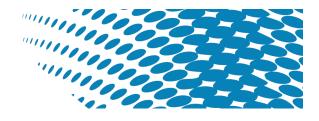
Processing	
Deposition	Syringe \ Screen \ Stencil
Recommended Curing Conditions	
60 minutes	140 °C
30 minutes	150 °C

For all physical properties reported, the material was processed at 140 °C for 60 minutes



ACI Materials Inc. ACI Data Sheet TU5236 Rev 6 Page 1 of 2





Contact ACI

Email: <u>info@acimaterials.com</u> Phone: (805) 324-4486 Website: www.acimaterials.com

Mailing and Shipment Address

ACI Materials, Inc. 44 Castilian Drive Goleta, CA 93117

Caution

Proper industrial safety precautions should be exercised in using these products. Use with adequate ventilation. Avoid prolonged contact with skin or inhalation of any vapors emitted during use or heating of these compositions. The use of safety eye goggles, gloves or hand protection creams is recommended. Wash hands or skin thoroughly with soap and water after using these products. Do not eat or smoke in areas where these materials are used. Refer to appropriate SDS information.

Disclaimer

The product information and recommendations contained herein are based on data obtained by tests we believe to be accurate, but the accuracy and completeness thereof is not guaranteed. No warranty is expressed or implied regarding the accuracy of these data, the results obtained from the use hereof, or that any such use will not infringe any patent. ACI Materials, Inc. assumes no liability for any injury, loss, or damage, direct or consequential, arising out of its use by others. This information is furnished upon the condition that the person receiving it shall make their own tests to determine the suitability thereof for their particular use, before using it. User assumes all risk and liability whatsoever in connection with their intended use. ACI Materials' only obligation shall be to replace such quantity of the product proved defective.



ACI Materials Inc. ACI Data Sheet TU5236 Rev 6 Page 2 of 2