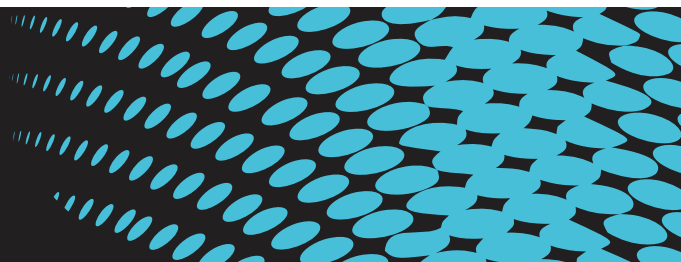


SE3103

Stretchable Encapsulant



Product Description

ACI SE3103 is a screen printable, thermally cured ink that is stretchable when cured and compatible with ACI's stretchable inks. SE3103 can be used as an encapsulant and/or crossover dielectric. The product uniformly deposits to form void free films and cures down to 80°C, which minimizes problems with low residual shrinkage polymer films and/or tight registration tolerance applications. When cured, the ink displays exceptional durability, excellent flexibility, and high insulation resistance. SE3103 has excellent adhesion to TPU, and is fully compatible with ACI's suite of products engineered for stretchable and flexible electronics.

Product Benefits

- Excellent adhesion to elastomeric substrates.
- Maintains flexibility and stretchability to more than 100% elongation.
- Cures at low temperatures for sensitive substrates and components.
- Good dielectric breakdown strength.
- Fully compatible with ACI's stretchable inks and conductive adhesives.

Typical Performance	
DC Breakdown ¹	>500 V/mil
Adhesion ²	5B
180° Crease Test	No Breaks or Delamination
Typical Properties	
Physical State	Paste/Ink
Color	Translucent White
Viscosity ³	35 Pa·s
Density	1.11 g/mL
Percent Solids	25%
Shelf Life at 20°C	6 Months
Typical Processing Parameters	
Deposition	Screen Printing
Film Properties	
Cured Film Thickness	8 – 25 µm
# of Layers	1 – 3
Individual Layer Thickness	8 – 10 µm
Recommended Printing Conditions	
SS Mesh	150 – 200
Squeegee	70 – 90 Shore A
Leveling Time	30 seconds
Recommended Curing Conditions	
≥120°C	10 min
Clean Up	Acetone/MEK/Similar Solvents
¹ ASTM D149 ² Autostat CUS5, ASTM D3359 Method B ³ Anton Paar MCR302 10 s ⁻¹ at 25°C	



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Contact ACI

ACI Materials, Inc.
44 Castilian Drive
Goleta, CA 93117
info@acimaterials.com

805-324-4486
www.acimaterials.com

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.

