FE5237

Stretchable Glob Top Encapsulant

Product Description

FE5237 is an epoxy based glob top encapsulant that remains stretchable following thermal cure. The encapsulant can be used in combination with ACI's stretchable ECAs and NCAs for interconnect solutions. The material can also be used as a standalone to electrically insulate and protect components mounted to flexible and stretchable systems, or for rigid systems to manage stresses arising from large thermal expansion mismatches.

Product Benefits

FE5237 is a filled non-conductive epoxy used to encapsulate 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 encapsulant exhibits a unique combination of high compliance and high adhesion to a broad range of materials, including plastics, metals, glass and ceramics.

Typical Performance	
Lap Shear Strength	> 1,500 kPa
Tg	- 10 °C
Stretch	50%
Typical Properties	
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	>97%
Shelf Life at -40°C ²	12 Months
Pot Life	14 – 16 hours
Weight Loss on Cure	<2%
Weight Loss at 300°C TGA	<3%

- ¹ Anton Paar MCR302 at 25 °C
- Storage at different temperatures can adversely affect properties

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

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





Contact ACI

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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

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