



Product Information Sheet

EPO-TEK® TV1002

Date: September 2017 **Recommended Cure: Pre-Bake: 150°C/1 Hour + 275°C/1 Hour**
Rev: III
No. of Components: Single
Mix Ratio by Weight: N/A
Specific Gravity: 1.22
Pot Life: N/A **Dry Time:** 28 Days
Shelf Life- Bulk: One year at room temperature

NOTES:

- Container(s) should be kept closed when not in use.
- Filled systems should be stirred thoroughly before mixing and prior to use.
- Performance properties (rheology, conductivity, others) of the product may vary from those stated on the data sheet when bi-pak/syringe packaging or post-processing of any kind is performed. Epoxy's warranties shall not apply to any products that have been reprocessed or repackaged from Epoxy's delivered status/container into any other containers of any kind, including but not limited to syringes, bi-paks, cartridges, pouches, tubes, capsules, films or other packages.

Product Description: A single component, screen printable polyimide adhesive designed for semiconductor wafer passivation applications. It is a high temperature chemistry capable of resisting >400°C seen in back-end wafer fabrication processes. Coating thicknesses of 10-90 um may be achieved. Ultra fine print definition, high Tg, low outgassing, and ionic cleanliness are a few of its traits.

Typical Properties: Cure condition: varies as required Different batches, conditions & applications yield differing results.
Data below is not guaranteed. To be used as a guide only, not as a specification. * denotes test on lot acceptance basis

PHYSICAL PROPERTIES:			
* Color (before cure):	Black		
* Consistency:	Smooth paste		
* Viscosity (23°C) @ 0.5 rpm:	350,000-550,000	cPs	
Thixotropic Index:	> 1.3	(between 0.5 & 1 RPM)	
* Glass Transition Temp:	≥ 200	°C (Cure 150°C/1 Hour + 275°C/1 Hour: Ramp 20°C/Min to 350°C)	
Coefficient of Thermal Expansion (CTE):			
	Below Tg:	46	x 10 ⁻⁶ in/in°C
	Above Tg:	139	x 10 ⁻⁶ in/in°C
Shore D Hardness:	80		
Lap Shear @ 23°C:	N/A		
Die Shear @ 23°C:	3.8	Kg	
Degradation Temp:	519	°C	
Weight Loss:			
	@ 200°C:	0.22	%
	@ 250°C:	0.23	%
	@ 300°C:	0.29	%
Suggested Operating Temperature:	< 400 °C (Intermittent)		
Storage Modulus:	1,130,000	psi	
Ion Content:	Cl ⁻ :	50 ppm	Na ⁺ : 107 ppm
	NH ₄ ⁺ :	27 ppm	K ⁺ : 2 ppm
* Particle Size:	≤ 10 microns		
ELECTRICAL AND THERMAL PROPERTIES:			
Thermal Conductivity:	0.8	W/mK	

This information is based on data and tests believed to be accurate. Epoxy Technology, Inc. makes no warranties (expressed or implied) as to its accuracy and assumes no liability in connection with any use of this product.

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