

Product Information Sheet

EPO-TEK® T7109-20

Date: September 2017 Recommended Cure: 80°C / 2 Hours

Rev: IV
No. of Components: Two
Mix Ratio by Weight: 10 : 1.5

Specific Gravity: Part A: 1.35 Part B: 1.02

Pot Life: 1.5 Hours

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.
- Syringe packaging will impact initial viscosity and effective pot life, potentially beyond stated parameters.

Product Description: Flexible thermally conductive epoxy. A more flexible version of EPO-TEK® T7109-19.

<u>Typical Properties:</u> Cure condition: 80°C / 2 Hours 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):	Part A: Grey	Part B: Clear/colorless
* Consistency:	Smooth paste	
* Viscosity (23°C) @ 5 rpm:	30,000-60,000	cPs
Thixotropic Index:	2.8	
* Glass Transition Temp:	≤ 20	°C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -40-200°C @20°C/Min)
Coefficient of Thermal Expansion (CTE)		
Below To	: 52	x 10 ⁻⁶ in/in°C
Above To	: 233	x 10 ⁻⁶ in/in°C
Shore A Hardness:	78	
Lap Shear @ 23°C:	778	psi
Die Shear @ 23°C:	≥ 5	Kg 1,778 psi
Degradation Temp:	307	°C
Weight Loss:		
@ 200°C	: 0.21	%
@ 250°C	: 0.51	%
@ 300°C	1.84	%
Suggested Operating Temperature:	< 250	°C (Intermittent)
Storage Modulus:	2,494	psi
* Particle Size:	≤ 20	microns

ELECTRICAL AND THERMAL PROPERTIES:				
Thermal Conductivity:	0.9	W/mK		
Volume Resistivity @ 23°C:	$\geq 1 \times 10^{11}$	Ohm-cm		
Dielectric Constant (1KHz):	4.10			
Dissipation Factor (1KHz):	0.074			