



## Preliminary Product Information Sheet

### **EPO-TEK® 509EBT-M1 (formerly 78-127)**

*Note: These are typical properties to be used as a guide only, not a specification. Data below is not guaranteed. Different batches, conditions and applications yield differing results.*

**Date:** September 2017  
**Rev:** II  
**No. of Components:** Two  
**Mix Ratio by Weight:** 100 : 47  
**Specific Gravity:** Part A: 1.15      Part B: 1.03  
**Pot Life:** 30 Minutes  
**Shelf Life- Bulk:** One year at room temperature

**Recommended Cure: 60°C / 2 Hours**

Minimum Alternative Cure(s):  
*May not achieve performance properties listed below*  
23°C / 24 Hours

#### **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:** Two component, slightly thixotropic epoxy suggested for general adhesive bonding, sealing, potting and encapsulation. Replacement for EPO-TEK® 509EBT-M.

#### **MATERIAL CHARACTERISTICS\*:**

<b>PHYSICAL PROPERTIES:</b>		<b>Cure condition: varies as required</b>	
Color (before cure):		Part A: Black	Part B: Amber
Consistency:		Thixotropic paste	
Viscosity (23°C) @ 50 rpm:		6,217	cPs
Thixotropic Index:		3.4	
Glass Transition Temp:		75	°C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)
Coefficient of Thermal Expansion (CTE):	Below Tg:	67	x 10 <sup>-6</sup> in/in°C
	Above Tg:	277	x 10 <sup>-6</sup> in/in°C
Shore D Hardness:		82	
Lap Shear @ 23°C:		> 2,000	psi
Die Shear @ 23°C:		16.3	Kg
Degradation Temp:		327	°C
Weight Loss:	@ 200°C:	0.07	%
	@ 250°C:	0.18	%
	@ 300°C:	0.42	%
Suggested Operating Temperature:		< 250	°C (Intermittent)
Storage Modulus:		298,633	psi
Particle Size:		≤ 20	microns

  

<b>OPTICAL PROPERTIES @ 23°C:</b>		
Spectral Transmission:	< 10% @300-700	nm
Refractive Index:	N/A	

**The data above is INITIAL only - it may be changed at any time, for any reason without notice to anyone. It is provided only as a guide for evaluation/consideration.**

\* These material characteristics are typical properties that are based on a limited number of samples/batches. All properties are based on the cure indicated above. Some properties may vary as manufactured quantities are scaled up to commercialized production levels.