

## Technical Data Sheet

EVPU4500-A-10AB is a two-component thermally conductive structure adhesive which can be cured at room temperature or quickly by heat. This product is a double tube thixotropic, 1:1 ratio, high strength, high thermal conductivity, flame retardant polyurethane structural adhesive which can bond Al, PET, SMC, BMC and other composite and metal materials.

### Material Properties

• 100% solid content, no harmful volatiles, non-toxic, environmentally friendly. Good adhesion and suitable for bonding a variety of substrates. Excellent chemical resistance and bond strength.



### Applications

- ✓ Suitable for new energy power lithium battery pack assembly, to provide heat transfer, buffering, high strength bonding and flame retardant. Polyurethane structural adhesive, can bond Al, PET, SMC, BMC and other composite and metal materials.

### Surface Treatment

- 1) The surface to be bonded should be polished by sandblasting or grinding to remove any rust and oxidation.
- 2) Clean the polished substrate surface with non-residual solvent or cleaning agent.
- 3) After properly cleaning, the substrate surface should be fitted as soon as possible to avoid rust and contamination to re-occur.
- 4) After the substrate surface has been thoroughly cleaned avoid skin contact with the surface to prevent surface oil residue.
- 5) The surface must remain completely dry and clean during fitting and bonding.

Prepare by mixing : use the adhesive gun to directly squeeze the mixture to the surface.



## EVPU4500-A-10AB Thermally Conductive Adhesive

Item	Unit	Test value
<b>Before the curing</b>		
Basic raw materials	/	A: polyols; B: Isocyanate
Color	/	A: gray; B: white
Density	g/cm <sup>3</sup>	A:1.67±0.3; B:2.02±0.3
<b>After mixing</b>		
Color	/	Gray
Ratio (volume ratio)	/	1:1
Viscosity	/	Thixotropy
<b>After curing</b>		
Hardness	ShoreD	55±5
The density of	g/cm <sup>3</sup>	1.87
Tensile strength	MPa	17
Elongation at break	%	60
Shear strength (Al-Al)	MPa	16
Aging (double 85,1000 H) α1-α1	MPa	15
thermal conductivity(ASTM D5470)	W/(m.k)	1.0
Working temperature	°C	-40°C~85°C
RoHS	PASS	IEC 62321
Halogen	PASS	EN14582
REACH	PASS	EN14372

Test fixtures using ASTM D5470. Recorded values include interface thermal resistance. These values are for reference only. The actual application performance is directly related to the applied surface roughness, flatness and pressure.

## CR Technology, Inc

📍 55 Chase St. Methuen,  
Massachusetts 01844

✉ sales@crtechinc.com

☎ 978.681.5300

**Note:** The information provided herein is accurate at time of publication. It is the responsibility of the end-user to confirm compliance to their application. All test data is typical. Therefore, these recommendations and data are for reference only and not as a product warranty.