



# Technical Data Sheet

## BE490-40 Structural Epoxy Adhesive

### PRODUCT DESCRIPTION

BE490-40 is a 1:1 high performance toughened structural epoxy adhesive, providing excellent mechanical and temperature performance up to 130°C. BE490 has been designed specifically for bonding of carbon composite parts and metal to provide excellent strength and dynamic load and vibration performance.

### Properties

- Non-sag suitable for vertical applications
- Suitable for spreading on uneven surfaces
- Black gloss finish when cured

### MECHANICAL PERFORMANCE

Shore Hardness (D) *	80
Tensile Strength - Aluminum *	27 MPa
Tensile Strength- Aluminum ***	3 MPa
Tensile Strength – Epoxy CRP *	37 MPa
Elongation at break % *	3%
Glass Transition Temp (TG)	73°C
Operating Temp Range **	-40°C to +130 °C

\*tested at 23°C after 7 days (Etched Aluminum)

\*\*Operating temperature is defined as the temperature at which the product keeps 80% of its lap shear strength, measured at 23°C.

\*\*\* tested at 130°C.

### PHYSICAL PROPERTIES

	Part A (resin)	Part B (hardener)	Mixed
Mix Ratio by Volume (1:1)	100	100	N/A
Colour	Off White	Black	Black
Consistency	Non Sag	Non Sag	Non Sag
Specific Gravity	1.12	1.03	
Viscosity CPS (Brookfield) @23°C	216,000	155,000	185,000
Pot life @ 23°C on a 100gr, min	N/A	N/A	25 Mins
Open time on 7mm bead @ 23°C, min	N/A	N/A	40 Mins
Time to Handling Strength @ 23°C, min	N/A	N/A	>4 hours

### HEALTH & SAFETY

This technical information sheet does not constitute a Material Safety Data Sheet (SDS). Before using this product ensure you have read and fully understood this products SDS.

### STORAGE

Shelf life 18 months from date of production when stored at 15°C to 23°C.

### PACKAGING FORMAT

50ml and 400ml Cartridges, bulk packaging

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