



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

Bondloc UK Ltd.
Units 1 & 2
Bewdley Business Park
Bewdley, Worcestershire
DY12 2TZ, UK

+44 (0) 1299 269 269
sales@bondloc.co.uk

PRECAUTIONS: This product and the auxiliary materials normally combined with it are capable of producing adverse health effects ranging from minor skin irritation to serious systemic effects. None of these materials should be used, stored, or transported until the handling precautions and recommendations as stated in the Material Safety Data Sheets (MSDS) for this and all other products being used are understood by all persons who will work with the product. **Warranty:** All products purchased from or supplied by Bondloc are subject to terms and conditions set out in the contract. Bondloc warrants only that its product will meet those specifications designated as such herein or in other publications. All other information supplied by Bondloc is considered accurate but are furnished upon the express condition the customer shall make its own assessment to determine the product's suitability for a particular purpose. Bondloc makes no other warranty, either express or implied, including those regarding such other information, the data upon which the same is based, or the results to be obtained from the use thereof; that any product shall be merchantable or fit for any particular purpose; or that the use of such other information or product will not infringe any patent.