



TCI 200-B

NSF 61

PRODUCT DESCRIPTION

TCI 200-B is a two-component, 100% solid, room temperature curing epoxy paste. Specially designed for FRP laminates, its high mechanical properties and chemical resistance make it ideal for wet-layup composite applications. TCI 200-B is formulated for use in potable water facilities, components are **ANSI/NSF 61 & NSF 372 Approved**, meeting and exceeding safety standards.

WHERE TO USE

- Thickened epoxy butter used as a filler coat for carbon/glass fibre
- 200-B must be used with other TCI products
 - TCI 800-D/W (PRIMER)
 - TCI CS-850 (CFRP)
 - TCI GS-500 (GFRP)

PROPERTIES

TCI-200-B Resin

TCI-200-B Hardener

Appearance	Clear	Clear
Specific Gravity @ 23°C, gm/cm ³	1.54 +/- 0.04	1.08 +/- 0.04
Viscosity @ 23°C, cps	Paste	40,000 +/-10,000
Pot Life @ 23°C, 200gm mass	1.0-1.25 hours	
Gel Time @ 23°C, 200gm mass	1.45-2.45 hours	
Cure Cycle:	3 Days @ Room Temperature. OR 6 Hrs @ 45°C + 24Hrs@ Room Temperature.	
Shelf life:	two (2) years in original unopened, properly stored containers	

PHYSICAL PROPERTIES OF CURED PRODUCT

EPOXY MATERIAL – Cured 24 Hrs @ 60°C		
TYPICAL TEST PROPERTIES	ASTM METHOD	TYPICAL TEST VALUE
Tensile Strength	D638	10,050 psi (69.3 MPa)
Tensile Modulus	D638	406 Ksi (2,800 MPa)
Elongation Percent	D638	7.5%
Flexural Strength	D790	16,900 psi (116.5 MPa)
Flexural Modulus	D790	478 Ksi (3,296 MPa)
Glass Transition Temperature Tg	E1545	94°C (201°C)

PACKAGING AND YIELD

TCI 200-B is a two-component system consisting of a resin and a hardener, packaged separately in pre-weighted pails, the total volume is 14 Litres when mixed together.

The yield when mixed is 28 **m²** [301 **ft²**] @ 0.5mm (20 mils) thick, applied in one coat.

STORAGE

- Store TCI 200-B in an environment where the ambient temperature does not fall below 5°C or reach above 30°C
- Store in dry conditions with original unopened packaging
- Never Store chemical containers in an environment exposed to the weather or direct sunlight

Environmental conditions

- Maintain a dry dehumidified environment and maintain the ambient temperature at a minimum of 10° F above the dew point.
- Substrate surfaces shall be at least at SSD (Saturated Surface Dry) condition prior to installation
- Maintain the required environmental conditions of substrate surfaces until at least 48 hours after applying 200-B
- The surface temperature of the substrate shall not fall below 5° C. Don't apply if the substrate surface temperature is above 40° C.

MIXING

- Mix TCI 200-B components, resin (Component 'A'), and hardener (Component 'B') for at least 5 minutes
- Always mix pre-weighed kits in their entirety to avoid human errors in proportioning the product components
- Mix the product in quantities according to the rate of application by the installation team
- Some settling of fillers and pigments will occur with time; therefore, thorough mixing of components containing fillers or pigments is necessary

APPLICATION

- Ensure concrete/steel substrates are primed prior to applying 200-B
- There is no need to prime the FRP laminate layer's prior to applying 200-B
- Apply the product within the pot-lifetime
- Apply 200-B using manual trowels and squeegees
- The thickness of the tack coat (butter) varies depending on substrate conditions and the aim of application
 - 200-B is recommended to be applied at a minimum thickness of between 0.38 mm to 0.5 mm (15 – 20 mils)
 - Do not apply 200-B at a thickness of more than 6.35 mm (250 mils)
- 200-B is tack-free after 24 hours, ensure the coating system is applied to the primed substrate surface before 24 hours
- Successive coats must be applied within the recoat window of 72 hours

This product data sheet shall be read in conjunction with CarbonStrong's CS-850 Composite datasheet.



Legal Disclaimer

Keep products containers tightly closed, keep products out of reach of children, products are not for internal consumption, products are for industrial use only, products are for professional use only. IN CASE OF EMERGENCY: Call CANUTEC +1 (613) 996-6666. Prior to each use of any product of Technical Construction Infrastructure Inc. ("TCI"), users must read and follow the warnings and instructions on the products most current product label, specification, products datasheet, products safety datasheet, and products material safety data sheet. Current safety datasheet, datasheet, and other TCI product literature can be obtained by emailing info@tcicarbonfibre.com, or by calling +1 (905) 997-5800. The information included herein is for illustrative purposes only, and to the best of our knowledge, is accurate and reliable. TCI cannot, however, under any circumstances make any guarantee of results or assume any obligation or liability in connection with the use of this information.