



TCI CarbonStrong 800-D Dry Primer

NSF 61

PRODUCT DESCRIPTION

TCI CarbonStrong 800-D is a two-component epoxy primer for dry substrates. Specially designed for TCI systems, its low viscosity and long pot life characteristics make it ideal for priming substrates. TCI CarbonStrong 800-D is formulated for use in potable water facilities, components are **ANSI/NSF 61 & NSF 372 Approved**, meeting and exceeding safety standards.

WHERE TO USE

- Can be used to prime dry concrete/steel substrates prior to coating applications.
- TCI CarbonStrong 800-D must be used with other TCI products.
 - TCI 855-R
 - TCI 855-SPL
 - TCI 200-B

PROPERTIES

Appearance

Specific Gravity @ 23°C (73.4°F), gm/cm³

Viscosity @ 23°C (73.4°F), cps

Pot Life @ 23°C (73.4°F), 200gm mass

Gel Time @ 23°C (73.4°F), 200gm mass

TCI 800-D Resin

Clear

1.15 +/- 0.02

3,500+/-500

1.5-2.0 hours

2-3 hours

TCI 800-D Hardener

Clear

0.98 +/- 0.02

80+/-20

Cure Cycle: 3 Days @ Room Temperature. OR 6 Hrs @ 45°C (113°F) + 24Hrs @ Room Temperature.

Shelf life: two (2) years in original unopened, properly stored containers.

TYPICAL USAGE

- ✓ Concrete wastewater pipes.
- ✓ Brick wastewater pipes.
- ✓ Manhole protection and rehabilitation.
- ✓ Water treatment facilities and transmission lines.
- ✓ Steel pipes and steel tanks.

PHYSICAL PROPERTIES OF CURED PRODUCT

EPOXY MATERIAL – Cured 24 Hrs @ 60°C (140°F)		
TYPICAL TEST PROPERTIES	ASTM METHOD	TYPICAL TEST VALUE
Tensile Strength	D638	10,400 psi (71.7 MPa)
Tensile Modulus	D638	408 Ksi (2,813 MPa)
Elongation Percent	D638	6.4%
Flexural Strength	D790	16,500 psi (113.8 MPa)
Flexural Modulus	D790	468 Ksi (3,227 MPa)
Glass Transition Temperature T _g	E1545	94°C (201°F)

PACKAGING AND YIELD

TCI CarbonStrong 800-D is a two-component system consisting of a resin and a hardener, packaged separately in pre-weighed pails, the total volume is 8 litres (2.1 gallons) when mixed together.



The general yield when mixed is 32 m^2 [344 ft^2] @ 0.25mm (10 mils) thick, applied in one coat. ***Yield varies, depending on substrate surface conditions.***

STORAGE

- Store TCI CarbonStrong 800-D in an environment where the ambient temperature does not fall below 5°C (41°F) or reach above 30°C (86°F)
- Never store chemical containers in an environment exposed to the weather or direct sunlight.
- Store in dry conditions with original unopened packaging.

APPLICATION

Environmental conditions

- Maintain a dry dehumidified environment and maintain the ambient temperature at a minimum of 3° C (5°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 TCI CarbonStrong 800-D.
- The surface temperature of the substrate shall not fall below 5° C (41°F). Don't apply the protective coating if the substrate surface temperature is above 40° C (104°F).

Surface preparation:

- Power wash substrates using a minimum of 5000 psi, sand blast, or use a mechanical bristle brush. The substrate must be clean and free of all contaminants such as dust, dirt, oil, grease, coatings and surface treatments, etc.
- Concrete substrate must be sound and clean. Remove all spalled or fractured areas. The substrate must be clean and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc.

Mixing:

- Mix TCI CarbonStrong 800-D components, resin (Part 'A') and hardener (Part '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.

Installation:

- Apply the product within the pot-lifetime.
- Apply the product using paint rollers and brushes.
- TCI CarbonStrong 800-D is tack-free after 24 hours, ensure the coating system is applied to the primed substrate surface within the re-coat window of 24 to 48 hours.

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.