

# TCI 800-D

**NSF 61** 

### PRODUCT DESCRIPTION

TCI 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. 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
- 800-D must be used with other TCI products
  - o TCI 855-R
  - o TCI 855-SPL
  - o TCI 200-B

PROPERTIES	TCI 800-D Resin	TCI 800-D Hardener
Appearance	Clear	Clear
Specific Gravity @ 23°C, gm/cm <sup>3</sup>	1.15 +/- 0.02	0.98 +/- 0.02
Viscosity @ 23°C, cps	3,500+/-500	80+/-20
Pot Life @ 23°C, 200gm mass	1.5-2.0 hours	
Gel Time @ 23°C, 200gm mass	2-3 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

## FIELD OF APPLICATION

- 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			
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 Tg	E1545	94°C (201°C)	

## **PACKAGING AND YIELD**

TCI 800-D is a two-component system consisting of a resin and a hardener, packaged separately in preweighed pails, the total volume is 8 Litres when mixed together.



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

#### **STORAGE**

- Store TCI 800-D 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

#### APPLICATION

#### **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 the installation has been completed.
- The surface temperature of the substrate shall not fall below 5° C. Don't apply the protective coating if the substrate surface temperature is above 40° C.

## Surface preparation:

- Power wash substrates using a minimum of 5000 psi to remove existing coating, dust, laitance, grease, waxes, and any foreign particles from the substrate surface.
- Concrete substrate must be sound and clean. Remove all spalled or fractured areas.

#### Mixing:

- Mix TCI 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
- 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

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