

**TD.475 – TECHNICAL DATA: MERCAP-445™ Crack Treatment & Injection Epoxy**

Revised: 3/16/2023 Version: 1.4

**Product Class:** A two-component epoxy crack fill and treatment

**Description:**

MERCAP-445™ is a 100% solids, low viscosity, structural epoxy adhesive designed for treating cracks in concrete. MERCAP-445™ is a high moisture tolerant anchor adhesive.

**Uses:**

- Gravity filling horizontal cracks in dry or damp concrete
- Structural anchor bolt adhesive for horizontal applications
- General purpose adhesive for bonding dissimilar materials

**Features:**

- Adhesive for many types of substrates
- USDA, FDA, and CFIA compliant
- Bonds to dry or damp concrete
- Low viscosity
- 2 to 1 ratio by volume

**Physical Properties**

<u>Property</u>	<u>Test Standard</u>	<u>Result</u>
Pot Life	ASTM C881	14 minutes
Colors (mixed)		Clear amber
Consistency		Flowable
Compressive strength	ASTM D695	13,500 psi
Bond strength	ASTM C882	325 psi 5 hours 550 psi 7 hours 2,100 psi 7 days
Water absorption	ASTM D570	0.04%
Heat deflection temperature	ASTM D648	121°F / 50°C
Elongation @ break	ASTM D638	3.75%
Viscosity:		
Part A Resin		600 cps
Part B Hardener		250 cps
Mixed		375 cps

**Coverages**

<u>Crack width x depth (inches)</u>	<u>Linear ft/gal</u>
1/8" X 1"	154
1/4" X 1"	77
1/2" X 1"	38.5
3/4" X 1"	25.7
1" X 1"	19.3

**Application:**

- Prepare the crack by cutting open using chasing or tuckpoint blade creating reservoir to control the epoxy.
- Pour mixed epoxy in the reservoir and refill as needed until no more is accepted into crack.
- When crack is filled, pour silica sand into reservoir.
- Allow to cure before grinding smooth and/or placing subsequent top coats or overlays.

**NOTE:** If epoxy adhesive is running through the bottom of the crack, add epoxy thickener to mix, tuck point into crack, and allow to cure.

**Available Packaging:**

- 900 ml cartridge and 1.5 gal kit

**Suggested Storage:**

- Store in a temperature and weather-controlled area between 65° F / 18° C and 85° F / 29° C.
- Do not allow to freeze.
- Shelf Life: 1 year in original unopened containers.