

# CEILCOTE® 680 C

*Conductive epoxy primer*

## DESCRIPTION:

CEILCOTE® 680 C (conductive) primer is a 100% solids conductive epoxy primer for application on concrete surfaces. When used, it overcomes the variable resistance of the concrete substrate and provides a conductive film under CEILCOTE epoxy systems so that the system can be tested for holidays (pinholes) with a high voltage detector.

## TYPICAL USES:

- Concrete surfaces subjected to chemical immersion
- Secondary containment areas
- Electronics/semiconductor manufacturing
- Munitions facilities
- Clean rooms
- Solvent storage rooms

## ADVANTAGES:

- Sparktesting on concrete surfaces ensures holiday free applications
- Discharge of static electricity when used in conjunction with conductive topcoats

## COLORS:

Available in black only

## PHYSICAL PROPERTIES:

Generic Type	Amine - adduct cured epoxy
Solids by Volume	100%
Viscosity	1200 to 1800 cps @ 77 °F (25 °C)
Volatile Organic Compounds	0.0 lb/gal
Weight/Gallon	10.0 ± 0.2 lb
Flash Point (Pensky-Martens Closed Cup)	
Liquid	204 °F (95 °C)
Hardener #9	228 °F (109 °C)
Adhesion	Excellent
Coverage	125 to 175 ft <sup>2</sup> /gal (3 to 4.3 m <sup>2</sup> /L) at 6 to 10 mils dry (Actual coverage will depend on surface texture)
Mix ratio	3.5:1 - Liquid to Hardener by volume. Observe Pot Life limitations.
Thinner	<b>DO NOT THIN</b>

## Handling Properties (Approximate Time)

Standard Formulation:

Temp.	Working Time	To Recoat	To Sustain Traffic
30.5 °F (1 °C)	8 h	20 h	36 h
45.5 °F (7 °C)	2 h	9 h	24 h
70.5 °F (21 °C)	45 min	5 h	12 h
90.5 °F (32 °C)	25 min	3 h	8 h

With LTC Accelerator:

Temp.	Working Time	To Recoat	To Sustain Traffic
30.5 °F (1 °C)	6 h	12 h	18 h
45.5 °F (7 °C)	1.5 h	4.5 h	12 h
70.5 °F (21 °C)	35 min	2.5 h	6 h
90.5 °F (32 °C)	20 min	1.5 h	4 h

## PACKAGING:

Available in 1 and 4 gal (U.S.) units.

## SHELF LIFE:

Six months when properly stored in unopened containers.

## LIMITATIONS:

CEILCOTE 680 C (conductive) primer cures slowly at lower temperatures. For speeding the cure, order 4 oz. LTC Accelerator per gal of P-680 C and Hardener No.9.

Primer should be topcoated within 1 week when exposed to sunlight; otherwise, must be topcoated within 4 weeks to assure proper adhesion of topcoat to primer.

## APPLICATION:

### Surface Preparation

Grit blasting or scarification to remove laitance and surface contamination is recommended. Concrete must be thoroughly cured (minimum of 14 days) free of oils, curing solutions or mold release agents, dust, and must be dry at time of application.

### Mixing and Application

CEILCOTE 680 C (conductive) primer has a tendency to settle during storage and must be thoroughly mixed prior to adding the Ceilcote Hardener #9. After mixing, add hardener (1 part Hardener #9 per 3-1/2 parts primer) and mix for two more minutes to insure that the hardener is well dispersed. It is recommended that the CEILCOTE 680 C Conductive Primer be applied by roller using a short nap or mohair roller. A suitable brush may also be used.

Apply at 6 to 10 mills wet film thickness (125 to 175 ft<sup>2</sup>/gal).

### CLEAN UP:

Use CEILCOTE Solvent T410, MEK or lacquer thinner. Observe fire and health precautions with solvents.

### TESTING:

Linings and coatings applied over CEILCOTE 680 C (conductive) primer can be tested for holidays. A specific method for high voltage holiday testing is addressed in **ASTM D 4787 "Standard Practice for Continuity Verification of Liquid/ Sheet Linings Applied to Concrete"**.

### SAFETY:

Store in cool, dry area (65 to 75 °F) away from direct sunlight, flame or other hazards.

CEILCOTE 680 C (conductive) primer contains epoxy resins and a polyamine catalyst. The product's components have been formulated to optimize physical characteristics such as filling capacity, abrasion, moisture and chemical resistance while minimizing hazardous physical and health factors encountered during application. A concerned effort is made to be aware of the latest chemical toxicological information and to apply this knowledge in a responsible manner to insure product safety.

During application of CEILCOTE 680 C (conductive) primer materials, always wear gloves and appropriate work clothing to minimize contact. Ventilation is required with special consideration for enclosed or confined areas. Air movement must be designed to insure turnover at all locations in work area and adjacent areas to avoid buildup of heavy vapors. Use caution when handling flammable liquids, eliminate sources of ignition from work area, and containers with residues.

Observe safe storage practices by separating resins from hardeners, by keeping solvents in a cool area free of sources of ignition.

Product Material Safety Data Sheets are available and should be consulted when handling products. These products are for industrial and professional use only; application directions must be followed.

### MAINTENANCE:

Periodically inspect the applied material and repair localized areas needed. Consult your Master Builders representative for additional information.

Master Builders, Inc.  
United States  
23700 Chagrin Boulevard  
Cleveland, Ohio 44122-5554  
(800) MBT-9990  
Fax (216) 831-6910

Canada  
3637 Weston Road  
Toronto, Ontario M9L 1W1  
(800) 387-5862  
Fax (416) 741-7925

Mexico  
Blvd. M. Avila Camacho 80, 3er Piso  
53390 Naucalpan, México  
011-525-557-5544  
Fax: 011-525-395-7903