

Description

CEILCOTE® 800 Coroline lining is a heavy duty, monolithic flooring/lining system that is designed to protect concrete and metal against attack by corrosive chemicals and mechanical abuse. Based on novolac epoxy technology, CEILCOTE 800 Coroline lining provides exceptional resistance to 98% Sulfuric Acid, Sodium Hydroxide and other aggressive chemicals.

Unique to novolac technology, the extended working time of CEILCOTE 800 Coroline lining makes the product user friendly, resulting in easier application and less waste.

Typical Uses

- Tank linings
- Heavy traffic areas requiring chemical protection
- Floors and chemical trenches
- Truck loading/unloading areas
- Secondary containment areas
- Sumps

Advantages

- Superior resistance to 98% Sulfuric Acid
- Superior resistance to Oleum
- Extended working time
- Tough, durable system
- Moisture tolerant cure
- Seamless surface
- Low odor
- 100% Solids

Chemical Resistance

CEILCOTE 800 Coroline lining provides exceptional resistance to 98% Sulfuric Acid, Sodium Hydroxide and other aggressive chemicals. For specific chemical resistance data, refer to the CEILCOTE Corrosion Resistance Guide or contact Ceilcote.

Substrate

Refer to Ceilcote concrete specification CPT-1 for concrete requirements and CPT-2 for steel.

Surface Preparation

Metal - Steel must be abrasive blasted to "White Metal" for optimum performance. (Refer to SSPC SP 5 (Sa3 (ISO 8501-1:2007)) or NACE Specification No. 1). A minimum abrasive blast profile of 4 mils (100 microns) is required. Please refer to Construction Specification CPT-2.

Concrete - Abrasive blasting or scarification to remove laitance and surface contaminants is recommended. Concrete must be thoroughly cured, free of oils, curing solutions and mold release agents, dust and must be dry at time of application. Use ASTM D 4263 (plastic sheet test method) to ensure concrete is moisture free. If moisture is detected, re-test until dry. Alternately test per ASTM 1869 for maximum 3 lbs / 24hrs, 1000 sq.ft. (92.2m²) For concrete quality and preparation, please refer to Construction Specification CPT-1, CP-14, CP-17 and CS-10.

Application

The surfaces to be lined should be at a minimum temperature of 50°F (10°C) for proper application.

Primers:

For Steel Surfaces: CEILCOTE 680 Primer

For Concrete: CEILCOTE 680 Primer

CEILCOTE 680C (Conductive) Primer

(Use where spark testing of concrete is required)

Mix and apply primer per instructions. Prime surfaces and allow material to cure tack free before proceeding.

Placement:

1. Be certain the cured primer is clean and dust free.
2. For base coat/saturant mechanically premix CEILCOTE 800 Coroline components individually (i.e. Part A, Part B) prior to blending together. After initial mixing, add Hardener #15 to CEILCOTE 800 Coroline Resin and mix for three to five additional minutes.
3. In small amounts, add and mix a total of 20 to 24 pounds Type S-1 Powder per gallon (2.4-2.8 kg/lit) of CEILCOTE 800 Coroline lining. More or less powder may be added as required. Use within 15 minutes after adding hardener.
4. Using a trowel, apply 60 to 80 mils (1500-2000 microns) of base coat.
5. Press the reinforcing cloth into the base coat, leaving no wrinkles or hollows. Lap each strip about 1" over preceding strips. Press the cloth carefully into all corners. When the cloth is being placed overhead, allow the base coat to get a little firm, not hard, before saturating cloth.
6. Saturating should be done before the base coat has hardened. Mix the CEILCOTE 800 Coroline Resin and Hardener #15 as instructed above.
7. Apply the saturant with a brush or roller until all cloth is translucent. Let cure approximately 16 hrs.
8. Examine the cured saturating coat before recoating. If it appears damp or has a film on it, wash it with water and allow material to dry.
9. For topcoat mechanically premix CEILCOTE 800 Coroline components individually (i.e. Part A, Part B) prior to blending together. After initial mixing, add Hardener #13 to CEILCOTE 800 Coroline Resin and mix for three to five additional minutes.
10. In small amounts, add and mix a total of 20 to 24 pounds Type S-1 Powder per gallon (2.4-2.8 kg/lit) of CEILCOTE 800 Coroline material. More or less powder may be added as required. Use within 15 minutes after adding hardener.
11. Trowel on 60 mils of topcoat. Smooth it by dampening a clean, soft brush with T-420 and brushing lightly to remove trowel marks. If an extra smooth surface is desired, allow topcoat to become a little firm before brushing.

Mixing Ratio	By Volume
680 Primer Resin	3
#9 Hardener	1
800 Coroline BC Resin	1.38
#15 Hardener	1
800 Coroline TC Resin	2.5
#13 Hardener	1

Handling Properties

Working Time	680 Primer	800 Coroline
50°F (10° C)	60 min	90 min
70°F (21° C)	30 min	40 min
90°F (32° C)	15 min	15 min

Recoat	680 Primer	800 Coroline
50°F (10°C)	9 hrs	24 hrs
70°F (21°C)	5 hrs	10 hrs
90°F (32°C)	3 hrs	6 hrs

Cure Time*	
50°F (10° C)	3-4 days
70°F (21° C)	24 hrs
90°F (32° C)	12-16 hrs

* For concentrated sulfuric acid exposure information, consult CEILCOTE.

Coverage

CEILCOTE 680 Primer

Concrete	150-200 ft ² /gallon (3.7-4.9 m ² /liter)
Steel	250-325 ft ² /gallon (6.1-7.9 m ² /liter)
With the addition of Ceilcote C#1	140-160 ft ² /gallon (3.4-3.9 m ² /liter)

CEILCOTE 800 Coroline (basecoat/saturant) 28-30ft²/gallon
(0.68-0.73 m²/liter)

CEILCOTE 800 Coroline (topcoat) 43-45 ft²/gallon
(1.0-1.1 m²/liter)

Type S-1 Powder 50 ft²/bag

Type S-1 Powder basecoat only 100 ft²/bag

Type S-9AR Powder topcoat only 83 ft²/bag

Type S-10AR Powder topcoat only 83 ft²/bag

Type B-4 Powder 62 ft²/bag

H Cloth / 1 ½ oz Mat 1.1 sq ft/ sq ft

T-420 Smoothing Liquid 200 ft²/gallon (4.9 m²/liter)

Packaging

The following standard packages are available

CEILCOTE 680 Primer 1, 4 & 40 gal units
(3.79, 15.14, 151.4 liter units)

CEILCOTE 800 Coroline 1, 5 gal units
(3.79, 18.92 liter units)

Powders 50 lb (22.65 kg) bags

H Cloth / 1 ½ oz Mat per sq ft

T-420 Smoothing Liquid 1 & 5 gal
(3.79, 18.92 liter units)

Storage

Store material in a cool, dry and covered location [50° - 90°F (10° - 32°C)], away from fire hazards and direct sunlight. Minimum shelf life at 70°F (21°C) for each component is indicated below:

CEILCOTE 680 Primer 18 months

CEILCOTE 800 Coroline 18 months

S-1, S-9AR, S-10AR Indefinite, if kept dry

H Cloth / 1 ½ oz Mat Indefinite

T-420 Smoothing Liquid 2 years

Higher temperature will shorten the shelf life of these products. All liquid products are to be stored in a frost-free place.

Safety

CEILCOTE 800 Coroline material 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 concerted 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 800 Coroline 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 as needed. Consult your CEILCOTE representative for additional information.

Technical and Physical Data

	Test standard	Unit	Value
Generic Type			Novolac epoxy
Compressive Strength	ASTM C579	Psi (MPa)	12,000 (83)
Tensile Strength	ASTM C307	Psi (MPa)	3,000 (20)
Service Temperature Limits		°F / °C	
Frequent or Severe Spills			150 (66)
Occasional Splash/Spill			200 (93)

Important Note

The information in this data sheet is not intended to be exhaustive; any person using the product for any purpose other than that specifically recommended in this data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at their own risk. All advice given or statements made about the product (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability at all for the performance of the product or for (subject to law) any loss or damage arising out of the use of the product. WE HEREBY DISCLAIM ANY WARRANTIES OR REPRESENTATIONS, EXPRESS OR IMPLIED, BY OPERATION OF LAW OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. All products supplied and technical advice given are subject to our Conditions of Sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is liable to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to check with their local International Paint representative that this data sheet is current prior to using the product.

Issue date: 18/06/07

 International and all product names mentioned in this publication are trademarks of, or licensed to, Akzo Nobel.

© Akzo Nobel

www.ceilcotec.com
www.international-pc.com