

Description

CEILCOTE 848 Corrosion Grout is a three-component chemical-resistant epoxy novolac grouting material. It provides high strength, good adhesion to concrete and steel, minimal shrinkage and resists degradation by corrosive chemicals.

In its packaged units, it is a flowable grout for placement under machinery and structural support bases and plates where resistance to strong chemicals, including sulphuric acid, is required. It may be used as a castable or trowelable polymer concrete by addition of 20 to 50 lbs (10-23kg) of rounded clean dry aggregate (pea gravel) per 163 lb (74kg) unit.

Typical Uses

- Chemical Pump Pads
- Process Equipment
- Structural Steel Supports
- Pedestals
- Concrete Repair (polymer concrete)

Advantages

- Excellent chemical resistance
- High Strength
- Superior adhesion
- Fast cure
- Low exotherm

Chemical Resistance

CEILCOTE 848 Grout has excellent resistance to concentrated sulphuric acid, sodium hydroxide, oils, water, and various chemicals. Information on the chemical resistance properties will be furnished on request.

Substrate

The substrate must be strong, dry and free of contamination.

Surface Preparation

Concrete surfaces must be roughened to remove all laitance. Recommended procedure is to chip the concrete to expose aggregate. Concrete surfaces must be clean. When 848 grout will be extended and used as a castable or trowelable polymer concrete, the concrete surface should be primed with Ceilcote 680 Primer.

Use degreaser to remove oil from steel. Abrasive blast all metal surfaces where a grout bond is desired. Build forms at least one inch above the bottom of equipment frame. Apply two coats of paste wax to forms. Be sure forms are completely sealed.

Application

CEILCOTE 848 Corrosion Grout is a three-component compound consisting of resin, hardener and aggregate.

Pour #15 Hardener into Resin, stir well. Pour resin/hardener mixture into mortar mixer. Add 3 bags of aggregate

gradually while mixing. Mix until all particles are wetted out. **Do not operate mixer over 20 rpm.** Working time for 848 Corrosion Grout is approximately 45 minutes at 70° F (21° C).

Pour the grout from one side in order to prevent any air entrapment underneath equipment or plates. If required, grout flow may be increased by prodding with sheet metal or plywood strips.

When used as a polymer concrete for concrete repair or for covering large open areas not underneath support plates, it should be extended by adding from 20 to 50 lbs (10-23kg) of rounded clean dry aggregate such as pea gravel after the 748 aggregate has been added to the mixer and mixed until all the aggregate is wetted.

Mixing Ratio

	By Weight	By Volume
<u>CEILCOTE 680 Primer</u>		
680 Primer Resin	100	3
# 9 Hardener	30	1
<u>CEILCOTE 848 Grout</u>	Mix complete units only	
848 Grout Resin	16 lbs (7.2kg)	
#15 Hardener	8.8 lbs (4kg)	
748 Grout Aggregate	138 lbs (62.5kg)	

Grout pour depth should not exceed 4 inches (102mm). Use multiple pours for deeper areas. Pour grout from one end to another in areas to be grouted. For added reinforcement especially in large open areas, embed ¼" to ½" steel rebar into the grout to minimize potential cracking. Cracks can be repaired by filling with the 848 Grout resin and #15 Hardener without the aggregate. Grout surface may be smoothed by hand troweling and then lightly brushing with mineral spirits.

Handling Properties

Working Time

Temperature	Primer	Grout
50°F (10°C)	60 min	100 min
70°F (21°C)	45 min	45 min
90°F (32°C)	20 min	25 min

Time to Place in Service

Temperature	Cure Time
50°F (10°C)	10 days
70°F (21°C)	5 days
90°F (32°C)	3 days

Coverage

Primer (optional): Steel 250 - 325 ft²/gal (6 - 8 m²/liter)
Grout 1.3 ft³
Polymer Concrete 1.5 - 1.6 ft³



Packaging

The following standard packages are available
CEILCOTE 680 Primer (optional) 1, 4 gal Units (3.79, 15.14 liter units)
CEILCOTE 848 Corrosion Grout 2.6 gal Unit (9.8 liter units)
CEILCOTE 748 Aggregate 46# Bag

Storage

Store in a cool, dry and covered location 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 848 Corrosion Grout 18 months
CEILCOTE 748 Aggregate Indefinite, if kept dry

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

Safety

Store in cool, dry area [50° - 90° F (10° - 32° C)] away from direct sunlight, flame or other hazards.

CEILCOTE 848 Corrosion Grout contains epoxy resins and polyamine catalyst. The product's components have been formulated to optimize physical characteristics such as strength 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 ensure product safety.

During application of CEILCOTE 848 Corrosion Grout 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			Silica filled, epoxy novolac
Density	ASTM C905-96	lbs/cu.ft.	125 (2.00)
Compressive Strength	ASTM C579-96 Method B	Psi (Mpa)	8,000 (55)
Tensile Strength	ASTM C307-94	Psi (Mpa)	2,500 (17)
Tensile Bond Strength (to concrete)	ASTM D4541-93	Psi (Mpa)	500 (3.5) exceeds the strength of concrete
Flexural Strength	ASTM C580-93	Psi (Mpa)	4,000 (28)
Flexural Modulus (tangent)	ASTM C580-93	Psi (Gpa)	1.6 x 10 ⁶ (11)

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.

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