



## **PRODUCT DATA SHEET: CERAM-GROUT GC**

**Description:** CeRam-Grout GC is a technically advanced ceramic epoxy material that has been designed for patching severe pitting in steel, spalling and cracks in concrete floors and walls where corrosion and chemical attack are problems. CeRam-Grout GC may be applied in thickness of 15 mils (375 microns) to 3/4" (19 mm) thick. CeRam-Grout GC is 100% solids by volume and provides a non-shrinking surface after application. Part A (Base) is gray in color and Part B (Curing Agent) is white in color so that when mixed in the right proportions, the blend will produce a gray grouting compound with no visible streaks.

CeRam-Grout GC is formulated for high abrasion, erosion and corrosive environments. It may be used to repair corroded metal pitting, cracks in concrete or spalling of concrete where a highly wear-resistant surface is desired.

CeRam-Grout GC is a superior modified epoxy resin system that is filled to maximum capacity with ceramic materials and cured by the addition of a proprietary curing agent.

CeRam-Grout GC is a high-build material that reduces labor costs. It is designed as a one-coat application to repair severely corroded and pitted structures and tank bottoms. It may be used as a stand-alone system or in conjunction with Freecom's CeRam-Kote 54® ceramic epoxy coating system.

**Suggested Uses:**

Tanks and Processing Vessels	Pump Impellers
Concrete Secondary Containments	Tile Sealer
Pump Housings	Pitted Steel Surfaces
Concrete Pump Bases	Concrete Floors
Concrete Walls and Floors of Cooling Towers	

## **TECHNICAL DATA**

<b>Number of Coats:</b>	One
<b>Volume Solids:</b>	100%
<b>VOC's:</b>	Zero
<b>Adhesion Pull Test:</b>	2,630 psi (19.06 MPa)      ASTM D4541
<b>Lap Shear Test:</b>	2,100 psi (15.22 MPa)      ASTM C961
<b>Minimum/Maximum Dry Thickness:</b>	CeRam-Grout GC may be applied at a minimum thickness of 15 mils (375 microns) to a maximum thickness of 750 mils (19mm or 3/4 inch).
<b>Coverage:</b>	Theoretical coverage is 25 sq. ft. (2.3 sq. meters) per gallon at 63 mils (1/16" or 1.6 mm) and 2 sq. ft. (0.1858 sq. meters) per gallon at 750 mils (3/4" or 19mm).
<b>Cure Time:</b>	CeRam-Grout GC should cure out in one to three (1-3) hours depending on the temperature and applied thickness.
<b>Color:</b>	Part A is gray. Part B is white. The A and B mixture is gray with no visible streaks when properly mixed.
<b>Surface Preparation:</b>	Proper surface preparation is critical to the long-term performance of the product. Optimum preparation will provide a surface free of oil, grease and salt/chloride contamination with an anchor profile of 3-4 mils (75-100 microns). This is normally achieved by abrasive blasting to a NACE-1 (SSPC-SP5, Swedish Sa-3) white metal finish and no less than a NACE-2 (SSPC-SP10, Swedish Sa-2½) near-white metal cleanliness. Grinding to a rough finish and solvent wash is acceptable, but a subsequent lowering of adhesion will result.
<b>Mixing:</b>	Mixing and application should be accomplished at air temperatures between 40°-100°F (4.4°-37.8°C). Each kit has been packaged with the proper mix ratio of 8:1 by volume. For longest working pot life, remove Part A (gray) from can and place on a mixing board and add Part B (white). Using a metal or plastic trowel, mix the two components together until no streaks exist and a consistent gray color is achieved. Spread the mix into a thin layer and use accordingly. If mix is left in a mass, an exothermic reaction will take place, drastically reducing pot life.

- Mixing Ratio:** One (1) part Component B to six (6) parts Component A by volume.  
One (1) part Component B to ten (10) parts Component A by weight.
- Shelf Life:** Keep cans out of direct sunlight to prevent heat buildup. If stored in a dry enclosed area under 95°F (35°C), CeRam-Grout GC has an indefinite shelf life. However, it is recommended that CeRam-Grout GC be used within two (2) years of delivery.
- Application:** Application may be accomplished at a minimum temperature of 40°F (4.4°C). If troweling material, press the material into the surface profile to completely wet out the substrate. On a flat surface, CeRam-Grout GC may be applied at a minimum of 15 mils (375 microns) to a maximum of 750 mils (19 mm or 3/4 inch) thickness in a single application provided runs or sags do not occur. On vertical surfaces, avoid sliding, runs or sags by applying thin, multiple layers to achieve the desired thickness of 15 mils (375 microns) up to a total thickness of 750 mils (19 mm or 3/4 inch). Contact Freecom technical support for more information. The material may be smoothed using a variety of methods similar to concrete surface finishing.
- CeRam-Grout GC may be machined with grinders or other hand tools if necessary after curing to produce the desired surface prior to applying CeRam-Kote 54® as a topcoat. CeRam-Grout GC may be topcoated as soon as it is dry to the touch which, depending on temperature is one to three (1-3) hours. CeRam-Grout GC and CeRam-Kote 54® may be placed into service within twenty-four (24) hours if cured at 70°F (21.1°C) depending on service environment. Lower temperatures require longer cure times and higher temperatures require shorter cure times.
- Climate:** Use CeRam-Grout GC only if the substrate temperature and ambient air temperature are above 40°F (4.4°C). No coating should be permitted when the substrate is wet from rain or dew, when surfaces are less than five degrees Fahrenheit (three degrees Celsius) above the dew point and holding or when relative humidity is greater than 85%. Moisture will inhibit the catalyst reaction and CeRam-Grout GC will not cure or perform properly.
- Repairs:** CeRam-Grout GC must be abraded prior to repair. Call Freecom Technical Support for repair recommendations.
- Packaging:** CeRam-Grout GC is packaged in one quart or one gallon kits. Each kit consists of a gallon or quart can of Part A (Base) and a container of Part B (Curing Agent).
- Cleanup:** Use MEK to clean tools immediately after application. If CeRam-Grout GC is allowed to cure on tools, it must be abraded off.
- Safety:** Safe storage, handling and use dictate that adequate health and safety precautions be observed with this product. User is specifically directed to consult the current Material Safety Data Sheet for this product as well as precautions contained on product labeling. CeRam-Grout GC should be stored below 95°F (35°C) and kept out of direct sunlight.
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