

# SPECPOXY GROUT CR

Chemical Resistant /High Strength Epoxy Grout



## DESCRIPTION

SPECPOXY GROUT CR is a specially formulated three component, 100% solids, high strength, novolac epoxy grout. The system combines a high strength epoxy resin and curing agent with a specially engineered blend of graded aggregates, with excellent chemical resistance. The special aggregate blend provides excellent flow and uniform distribution throughout the high strength epoxy matrix.

## FEATURES/BENEFITS

- **Excellent abrasion/chemical resistance**
- **Special aggregate allows high flow capability for limited access grout placement without segregation**
- **Excellent volume stability for maximum bond and load transfer in applications subjected to dynamic loading.**
- **Fast-cure and high early strength for minimal down time**
- **High compressive, bond, and tensile strength for maximum durability in vibration applications**
- **Pre-measured proportions for easy installation**
- **High modulus of elasticity and impact resistance**
- **Low exotherm epoxy resin for deep pours up to 18"**

## APPLICATION

**Mixing Instructions:** Air, material, and surface temperatures must be a minimum of 40°F prior to mixing or installation. To assist with mixing and dispensing, precondition material to 75°F. Mix three parts of Part A and one part of Part B by volume for three minutes with a low speed heavy-duty drill with Jiffy mixer in a separate 5 gal pail. Add the mixed epoxy to a mortar mixer for mixing larger (2 cu-ft) units slowly adding Part C (aggregate) and mixing for an additional 2-3 minutes. Maximum yield is achieved by mixing in all the Part C aggregate. Always mix full complete units.

**High Flow Applications:** Reduce the amount of Part C aggregate up to 25% by weight to create a more fluid grout consistency for difficult high flow placements.

**Surface Preparation:** Surfaces to be grouted must be clean, dry and structurally sound. Remove all oil, grease, dirt, laitance, and any other foreign matter and profile the surface by sandblasting, mechanical abrasion removing any residue with an oil free compressed air.

**Placing:** The mixed grout should be poured continuously and in such a manner as to provide full and complete contact with base plate, free of air voids. Strapping will facilitate moving the grout into position. Grout should be placed at a minimum of 1.0" thick up to a maximum of 18" thick per lift in a large mass. Full aggregate extension must be used for large applications in excess of 6" deep. Anchor bolt holes should be dry and free of all dust and debris before grout placement.

## CLEANING

**Tools and Equipment:** Uncured material can be removed with SpecChem Solvent 100, Orange Peel, or other approved solvent. Dispose of in accordance with local, state, and federal disposal regulations. Mechanical removal is necessary for cured material.

## STANDARDS

*Epoxy Grout:* Material shall be a 100% solids, high flow/high strength epoxy grout capable of applications up to 18" in a single pour.

USDA accepted for use in Food Processing applications  
Meets API Standard 686

## SHELF LIFE

Store SPECPOXY GROUT CR in its original containers and keep tightly closed. Do not allow the accumulation of water, dirt, or other contaminants. The shelf life of properly stored SPECPOXY GROUT CR is two years from date of manufacture.

## TYPICAL TEST RESULTS

| Compressive Strength (ASTM C-579)                    | Full Extension                 | 80% Extension                  |
|------------------------------------------------------|--------------------------------|--------------------------------|
| 1 day                                                | 16,000 psi                     | 14,500 psi                     |
| 7 days                                               | 17,000 psi                     | 15,500 psi                     |
| Post Cure 140°F (60°)                                | 18,000 psi                     | 16,000 psi                     |
| Compressive Modulus ASTM C 580                       | 2,100,000 psi                  | 2,000,000 psi                  |
| Linear Shrinkage ASTM C-531                          | Negligible                     | Negligible                     |
| Bond Strength (ASTM C-882) @ 14 days                 | 3,600 psi                      | 3,725 psi                      |
| Flexural Strength ASTM C 580                         | 5,600 psi                      | 5,675 psi                      |
| Tensile Strength ASTM C-307                          | 2575 psi                       | 2670 psi                       |
| Pot Life (75F)                                       | 1.0 hours                      | 0.75 hours                     |
| Hardness (Shore D)                                   | 95                             | 95                             |
| Coefficient of Thermal Expansion (max.) (ASTM C-531) | 16 x 10 <sup>-6</sup> in/in/°F | 17 x 10 <sup>-6</sup> in/in/°F |
| Compressive Creep (ASTM C1181)                       | 0.07% in/in                    | 0.10% in/in                    |

**SPEC**CHEM   
Solution to Service

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## PACKAGING

### 0.5 cubic foot unit

|        |              |
|--------|--------------|
| PART A | 0.75 gal     |
| PART B | 0.25 gal     |
| PART C | 1-50 lb. bag |

### 2.0 cubic foot unit

|        |                |
|--------|----------------|
| PART A | 3 gal          |
| PART B | 1 gal          |
| PART C | 5– 50 lb. bags |

## LIMITATIONS

Always test a small amount of SPECPOXY GROUT CR to verify that the product has been thoroughly mixed and will harden properly before proceeding. Do not thin with any solvent.

Surface and air temperatures must be a minimum of 40°F for application. Recommended application temperature is 55F to 95F. Higher temperatures will shorten work time and could limit pour volumes.

Deep application (over 6") require full aggregate extension. Protect From Freeze.

## PRECAUTIONS

Prolonged or repeated skin or eye contact may cause irritation. Use safety glasses and wear protective rubber gloves. If skin contact occurs, wash immediately with soap and water and seek medical help if needed. If eye contact occurs, flush immediately with water and seek medical help if needed. In case of ingestion, call a physician. Product is a sensitizer. Avoid breathing vapors.

### INDUSTRIAL USE ONLY

Additional precautions, safety and first aid information are contained in the SDS (Safety Data Sheet).

## WARRANTY

### NOTICE-READ CAREFULLY CONDITIONS OF SALE

SpecChem offers this product for sale subject to and limited by the warranty which may only be varied by written agreement of a duly authorized corporate officer of SpecChem. No other representative of or for SpecChem is authorized to grant any warranty or to waive limitation of liability set forth below.

### WARRANTY LIMITATION

SpecChem warrants this product to be free of manufacturing defects. If the product when purchased was defective and was within use period indicated on container or carton, when used, SpecChem will replace the defective product with new product without charge to the purchaser. SpecChem makes no other warranty, either expressed or implied, concerning this product. There is no warranty of merchantability. NO CLAIM OF ANY KIND SHALL BE GREATER THAN THE PURCHASE PRICE OF THE PRODUCT IN RESPECT OF WHICH DAMAGES ARE CLAIMED.

### INHERENT RISK

Purchaser assumes all risk associated with the use or application of the product.

## Chemical Resistance Chart 70°F (21°C)

| Solvents              | Organic Acids (Conc.)  | Bases / Alkalines (Conc.)   |
|-----------------------|------------------------|-----------------------------|
| Acetaldehyde          | Acetic (1-20%)         | Ammonia (1-25%)             |
| Acetone               | Acid Plating Solutions | Ammonium Hydroxide (1-25%)  |
| Acetonitrile          | Adipic (1-25%)         | Aniline                     |
| Acrylonitrile         | Azotic (1-50%)         | Barium Hydroxide (1-sat)    |
| Butyl Acetate         | Battery (1-95%)        | Black Pulp Liquor           |
| Cyclohexane           | Chromic (1-30%)        | Butyl Amine                 |
| Ethanol               | Chlorohydric (1-35%)   | Cadmium Cyanide Plating     |
| Ethyl Acetate         | Dibasic (1-sat)        | Calcium Hydroxide (1-25%)   |
| Ethyl Alcohol         | Ethanoic (1-50%)       | Chromium Trioxide (1-25%)   |
| Formaldehyde          | Ethyllic (1-50%)       | Copper Cyanide Plating      |
| Isopropyl Alcohol     | Engravers (1-50%)      | Dimethyl Aniline            |
| Jet Fuel              | Hydrochloric (1-35%)   | Hydrogen Peroxide (1-30%)   |
| Kerosene              | Hydrofluoric (1-35%)   | Green Pulp Liquor           |
| Methyl Ethyl Ketone   | Mattling (1-95%)       | Soap Solutions              |
| Methanol              | Nitric (1-50%)         | Sodium Cyanide (1-15%)      |
| Methyl Alcohol        | Oil of Vitriol (1-95%) | Sodium Hypochlorite (1-8%)  |
| Rubbing Alcohol       | Oleic                  | Sodium Hydroxide (1-50%)    |
| Wood Alcohol          | Phosphoric (1-80%)     | Triethanolamine             |
| 1,1,1 Trichloroethane | Sulfuric (1-95%)       | Triethylamine               |
| Phenol                | Vitriol (1-95%)        | Potassium Hydroxide (1-sat) |

*\* Note: There are many factors that can effect chemical resistance. Application design, service and exposure temperatures, type and amount of impurities in a chemical. The environment is also an important consideration. These test results are reported as a guide to the applicability of Novolac Systems.*



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