# Apr.2016

## High Chemically Resistant Tile Grout

## and Adhesive System

## Introduction

ResGrout-HCR is a unique, versatile, resilient, multi-purpose tile grout/adhesive; with excellent chemical resistance, and early development of Physical Properties.

## **Product Description**

- 3-Part, 100% Total Solids Epoxy Grout System Consisting of:
  - Part A- Resin
  - Part B- Hardener
  - Part C- Colored Quartz Fillers
- V.O.C. Compliant/Low Odor/Solvent Free
- Self-Priming
- Supplied in Pre-measured kits

## **Special Features**

- Excellent Adhesion to "GREEN" Concrete, No Primer Needed
- Passes ASTM C-884 for Thermal Compatibility with Concrete
- Resilient, Accommodates Tile Creep
- User Friendly Working Time
- 4 Hr Set Time at 73°F
- U.S.D.A. Compliant
- Excellent Adhesion to Clean, Sound Concrete, Tiles, and Acid Bricks
- Resists Thermal Shock(Steam Cleaning)
- High Abrasion and Impact Properties
- Application Indoors or Outdoors
- Outstanding Resistance to a Wide Range of Chemicals and Cleaning Products
- Made with Materials Produced in North America.
- Fast Turn-around Time

#### **Concrete Finish**

- ResGrout-HCR as a Tile Bedding, Must be Applied to a Wood Float or Textured Finish (Not Smooth)
- Smooth Concrete Must be Shot-Blasted or Scarified Prior to Application

## **Applications**

Breweries. Food and Beverage Plants. Dairies. Pharmaceutical. Meat Packing/Processing. Battery Plants. Heavy Industrial.

#### **Packaging**

**ResGrout-HCR** is available in the following pre-measured

3 Gallon Pre-Measured Kit (12.8SF @1/8" Thick)

3 Gallon Kit Consists of:

Part A- 7.80 lbs.

Part B- 2.80 lbs

Part C- 30 lbs.

Bulk Kits (contact factory)

\* Coverage will vary depending on surface texture.

#### **Priming**

ResGrout-HCR Does Not Require a Primer on Clean, Sound and/or Green Concrete; However, we recommend Priming to Help Reduce Outgassing, Blistering, etc.

\*Refer to Primer Product Res-Prime #3000

## **Setting Times**

ResGrout-HCR Is a User Friendly, Unique System with a 30-40 Min Pot Life that Will Set up for Foot Traffic within 4 Hrs(73°F);

Recommended for Surface Temperatures above 40°F, Please \* \* Consult Factory for Applications below 40°F \* See Set Time Chart on back page for various setting times.

## Mixina

Pre-Measured Kits:

Add Part B to Part A, and Mix for 20Sec

Add Part C with Pigment to Above, and Mix for 30Sec to a Uniform Consistency

Use a Variable Speed Drill, with a Mixing Blade (Drywall Mixer Blade) that is 1/2 the Diameter of the Mixing Bucket\* \* Mixing and application instructions are available request.

#### Colors

Gray, Dark Gray, Brick Red Special colors are available upon request (additional charges may apply)

## Clean Up

ResGrout-HCR, while still wet, can be cleaned up with a scouring pad and warm soapy water, but if allowed to set then mechanical cleaning or the application of a Suitable Paint Stripper.

## **ResGrout-HCR**



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**Precautions** As with all epoxies, good hygienic habits must be observed and the wearing of protective clothing and gloves is advised. Before using any of the products, please read their respective safety data sheets and installation guide

Density (lbs./gallon)

Part A: 9.51 Part B: 9.15 Mixed A & B: 9.41

Theoretical Bedding Coverage

3 Gallon Kit = 12.8 sf @1/8" Thick 3 Gallon Kit = 6.4 sf @1/4" Thick Mixing Ratio by Volume Part A:Part B – 2.5:1 A&B Mixed:C is 1:1.7

**Brick/Tile Jointing Coverage:** 

4" x 8" x 1-\%" \%" 25 sf; \%" 12.5 sf

#### **Set Time Guidelines**

Set Times (Slab Temperature)	60°F.	73°F.	90°F.
Pot Life	50 Minutes	40 Minutes	20 Minutes
Foot Traffic	6 Hours	4 Hours	2 Hours
Heavy Traffic	14 Hours	12 Hours	10 Hours
Full Chemical Resistance*	8 Days	7 Days	5 Days

<sup>\*</sup> Refer to Chemical Resistance Chart

#### **Chemical Resistivity Examples**

Beer	FS	Sulfuric Acid (80%)	FS
Animal Fat	FS	Phosphoric Acid (50%)	FS
Hydrochloric Acid (37%)	FS	Battery Acid	FS
Oleic Acid	FS	Lactic Acid (60%)	FS

<sup>(</sup>FS-Frequent Spillage)

### **ASTM Test Parameters** \*Above ASTM figures are within a +/- 5% tolerance

ASTM	TEST METHOD @ 73°F.	Liquids Only	Filled System
C579	Compressive Strength		4829 psi
C579	Percent Compressive Resiliency		6.83 %
	Ratio of Force to % Resiliency		707:1
C579	Compressive Strength @ Yield		3887 psi
C579	Percent Compressive Resiliency @ Yield		2.0 %
C580	Flexural Strength		2811 psi
C580	Flexural Modulus of Elasticity		5.78x10^5
C307	Tensile Strength Percent Tensile Elongation Ratio of Tensile Stress to % Elongation		1374 psi 6.95% 198:1
C321	Bond Strength to Concrete		Failure in Concrete
C884	Thermal Compatibility to Concrete	No Delamination	No Delamination
C413	Absorption-Filled		<1%
C413	Absorption-Unfilled	.1%	
D695	Compressive Strength Percent Compressive Resiliency Ratio of Force to % Resiliency	7004 psi 49.54% 141:1	
D695	Compressive Strength @ Yield Percent Compressive Resiliency @ Yield	3153 psi 10.14%	
D790	Flexural Strength	4560 psi	
D790	Flexural Modulus of Elasticity	1.64 x 10^5	

<sup>\*</sup>Complete Chemical Resistivity Chart Available at www.Resin-8.com

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D638	Tensile Strength Percent Tensile Elongation Ratio of Tensile Stress to % Elongation	1893 psi 19% 100:1	
D4541	Bond Strength to Concrete	Failure in Concrete	

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