

# MasterEmaco<sup>®</sup> T 5000

Novolac epoxy repair material & ancillary grout

## PACKAGING

Part A & B packaged in 1.5 gal box containing:

PART A RESIN: 1 gal (3.8 L) pail  
PART B HARDENER: 0.5 gal (1.9 L) pail

PART C AGGREGATE: 2 x 47 lb (21.3 kg) bags Part C MasterEmaco T 5000 Aggregate ordered separately

## YIELD

0.75 ft<sup>3</sup> (0.021 m<sup>3</sup>) per mixed unit (Standard Mix) 0.65 ft<sup>3</sup> (0.018 m<sup>3</sup>) per mixed unit (High-Flow mix)

## SHELF LIFE

2 years when properly stored

## STORAGE

Store in unopened containers in cool, clean, dry conditions.

## VOC CONTENT

0 g/L less water and exempt solvents

## DESCRIPTION

MasterEmaco T 5000 is a chemically resistant, low dust, repair mortar and ancillary grout with exceptional resistance to a wide variety of chemicals.

## PRODUCT HIGHLIGHTS

- Chemical resistant for excellent resistance to sulfuric acid and a wide range of industrial chemicals
- Low-dusting for added worker comfort and safety
- 100% solids resin system for solvent free and nearly odor free application
- Variable fill ratio of aggregate provides standard and high flow placement options to match project requirements
- Chemical resistance of patch from surface wear zone to bond line
- Compatible with MasterProtect 170 CR

## APPLICATIONS

- Interior
- Horizontal surfaces
- Chemical resistant patching
- Repairs prior to use of MasterProtect 170 CR

## SUBSTRATES

- Concrete

## HOW TO APPLY

### SURFACE PREPARATION

#### CONCRETE

1. Concrete must be structurally sound and fully cured (28 days).
2. Saw cut the perimeter of the area being repaired into a square with a minimum depth of 0.25" (6.4 mm). Featheredging results in reduced performance.
3. The surface to be repaired must be clean and dry.
4. Refer to current ICRI Guideline no. 310.2R for surface prep requirements to permit proper bond.

#### REINFORCING STEEL

1. Remove all oxidation and scale from the exposed reinforcing steel in accordance with ICRI Technical Guideline No. 310.1R.

**Technical Data**

**Composition**

MasterEmaco T 5000 is a 100% solids Novolac Epoxy resin with graded fine aggregates

**Typical Properties**

| PROPERTY  | VALUE          |
|---|----------------|
| <b>Working time, min, at 70 °F (21 °C)</b>                | 20             |
| <b>Light traffic, hrs, at 75 °F (24 °C)</b>               | 16             |
| <b>Regular traffic, hrs, at 75 °F (24 °C)</b>             | 24             |
| <b>Full chemical resistance**, days, at 75 °F (24 °C)</b> | 7              |
| <b>Application temperature range, °F (°C)</b>             | 50-120 (10-49) |

**Test Data**

| PROPERTY                                | RESULTS                                 | TEST METHOD                 |
|---|---|-----------------------------|
| <b>Compressive strength, psi (MPa),</b> |   |                             |
| Consistency                             | 1 Day      7 Day      Post cured*       | ASTM C 579 Method B – LR II |
| Standard                                | 3,930 (27)    9,200 (63)    11,000 (76) |                             |
| High Flow                               | 3,500 (24)    8,240 (57)    9,910 (68)  |                             |
| <b>Slant shear bond, psi (Mpa),</b>     |   |                             |
| Consistency                             | 7 Day                                   | ASTM C 882                  |
| Standard                                | 3,332 (23)                              |                             |
| High Flow                               | 3,363 (23)                              |                             |
| <b>Tensile strength, psi (Mpa)</b>      |   |                             |
| Consistency                             | 7 Day                                   | ASTM C 307                  |
| Standard                                | 1,358 (9)                               |                             |
| High Flow                               | 1,350 (9)                               |                             |
| <b>Dust Reduction, %</b>                |   |                             |
| MasterEmaco T 5000 Part C vs. control   | 85%                                     | DIN 55992-2                 |

\*Cured 24 hours at room temperature, post cured 16 hours at 140 °F, and conditioned 24 hours at test temperature.

\*\*For resistance to a specific chemical compound, consult the MasterEmaco T 5000 Chemical Resistance Guide

#### MIXING

1. Precondition to 70 °F for 24 hours prior to mixing
2. Stir each component (A & B) separately prior to mixing together
3. Mix 1 gallon of Part A with ½ Gallon of Part B, scraping the sides of the container to remove as much material as possible to ensure accurate mixing ratio.
4. Mix the components together using a jiffy mixer at slow speed (400-600 rpm) for at least 3 minutes until uniform color with no streaks of color in the mixture.
5. Add mixed resin to a vertical shaft or mortar mixer and then slowly add first bag of Part C aggregate until incorporated. Begin mixing and now slowly add remaining aggregate from second bag until incorporated (either full or half bag depending on standard or high flow mix respectively).
6. Mix only until aggregate is totally wetted out.

#### APPLICATION

1. Place the MasterEmaco T 5000 into the repair area and level the material.
2. Allow the patch to stiffen.
3. Finish in one direction only and within approximately 10 minutes after mixing at a temperature of 70 °F (21 °C)

#### CURING

Because MasterEmaco T 5000 is an epoxy repair mortar, wet or membrane curing is not recommended. Air cure only.

#### CLEAN UP

- Clean tools and equipment immediately after use with xylene.
- Clean hands and skin immediately with soap and water, industrial hand cleaner, or denatured alcohol.
- Cured material can be removed by mechanical means only.

#### FOR BEST PERFORMANCE

- Acceptable service temperatures vary depending on type of and frequency of chemical exposure. Contact Technical Service regarding your unique project considerations.
- Maximum application thickness is 4" (102 mm). Contact Technical Service for use beyond 4" (102 mm).
- For professional use only; not for sale to or use by the general public.
- Contact Technical Service regarding procedures to overcoat with MasterProtect 170 CR
- For precision grouting applications contact Technical Service
- Do not use for primary containment
- Make certain the most current versions of product data sheet and MSDS are being used; call Customer Service (1-800-433-9517) to verify the most current version.
- Proper application is the responsibility of the user. Field visits by Master Builders Solutions personnel are for the purpose of making technical recommendations only and are not for supervising or providing quality control on the jobsite.

#### HEALTH, SAFETY AND ENVIRONMENTAL

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use. The MSDS can be obtained by visiting [www.master-builders-solutions.com/en-us](http://www.master-builders-solutions.com/en-us), e-mailing your request to [mbsbscst@mbcc-group.com](mailto:mbsbscst@mbcc-group.com) or calling 1(800)433-9517. Use only as directed.

**IN CASE OF EMERGENCY: Call CHEMTEL +1 (800) 255-3924 or if outside the US or Canada, +1 (813) 248-0585.**

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