

## TECHNICAL DATA SHEET

### DESCRIPTION

Rapid Resin Repair is a high solids, low modulus, three-component, all weather, non-shrinking epoxy/urethane hybrid concrete repair and patching material. Rapid Resin Repair utilizes high solids epoxy/urethane technology along with specialty graded aggregates for achieving rapid turn around concrete repairs in all weather conditions.

### USE

Rapid Resin Repair is specifically formulated, designed and engineered for use as an all weather, interior/exterior concrete spall and crack patching and repair mortar where a rapid turn around time is critical or cold conditions are a concern. Rapid Resin Repair can be used for patching of bridge decks, overpasses and roadways surfaces, freezers and cold room floors, airport runways, warehouse floors and any concrete slab or floor traffic way in need of repair or patching where cold temperatures are present or rapid turn around time is required.

### FEATURES

- Non-shrink
- Chemically resistant
- Easy 1:1 mixing ratio for Parts A & B
- Cures in temperatures as low as -20°F (-29°C)
- Open to traffic within 20 minutes
- Meets FDA and USDA requirements
- Low Odor

### PROPERTIES

#### Colors:

Component A – Dark Amber; Component B - Light Amber, Component C - Natural Aggregate

Mix Ratio: 1:1 (liquids A & B)

Mix Ratio 1:3 (liquid to sand)

Viscosity (mixed neat):

Part A (resin): 150 cps

Part B (hardener): 250 cps

Gel Time: (100g mass) 3 minutes @ 73°F (23°C)

Compressive Strength (ASTM C 579) 3,500 psi (24 MPa)

Tensile Strength: (ASTM D 412) 1,500 psi (10.3 MPa)

Bond Strength: (ASTM C 882) 2,000 psi (13.7 MPa)

Hardness Shore: (ASTM D 2240) D Scale = 60-70

Elongation %: (ASTM D 412) 30%

Adhesion (ACI 503R) 400 psi concrete break

### VOC

V.O.C. Compliant – 0 g/l

### ESTIMATING GUIDE

Yield: 1 unit yields 0.45 cu. ft. (0.013 cu m)

### PACKAGING

ITEM #	PACKAGE	SIZE	
		cu. ft	(cu m)
309087	Unit	0.45	(0.013)

### STORAGE

Rapid Resin Repair should be stored in a dry temperature controlled environment between 50°F to 85°F (10°C to 29°C). Do not store in direct sunlight. Shelf life is 1 year if cans are unopened, undamaged, and stored properly.

### APPLICATION

**Surface Preparation:** Rapid Resin Repair is moisture sensitive and should not be applied to wet surfaces. New concrete must be a minimum of 28 days old and dry at the time of installation. Clean the area of all debris and contaminants; oil, grease, dust, dirt, unsound concrete etc. Expose clean roughened concrete for best results. Cut or chip a vertical edge, minimum ½ in. (1.3 cm) deep, around perimeter of the area to be patched. Make sure the area is clean dry and sound. Sandblasting may be necessary to expose clean concrete. Vacuum or blow off concrete dust and debris with oil-free compressed air.

**Mixing:** For temperatures below 10°F (-12.20C) kit contents should be preconditioned to 65°F - 85°F (18.30 - 29.40C). Have all components and tools ready and patch area properly prepared prior to mixing/placement. Mixing container, tools and patch area must be clean and dry prior to use. Mix only as much Rapid Resin Repair as can be used within the pot life of the material approximately 3-5 minutes at room temperature. Stir/shake each component A & B for 30 seconds.; Mix each component A & B together for 30 seconds then add component C aggregate and mix for an additional 30 seconds until all of the aggregate is wetted out. PLACE IMMEDIATELY.

**MIXING LESS THAN FULL KIT QUANTITIES:** Shake component B for 30 seconds. Mix equal parts (1:1 ratio) of components A and B vigorously for 30 seconds. Add 3 parts by volume of component C to 1 part mixed A & B components and stir for 30 seconds until aggregate is wetted out. PLACE IMMEDIATELY.

**Placement:** Pour and place the Rapid Resin Repair immediately after mixing. Use a clean steel trowel to force the Rapid Resin Repair down into the repair area and then to strike off the top surface to match the surrounding concrete. Steel trowels may be slicked off using Xylene to add a degree of lubricity to troweling

and clean off the trowel surface. After reaching set in about 20 minutes, the Rapid Resin Repair may be ground flat and level with the surrounding concrete using a flexible 7 in. (17.8 cm) grinding wheel to grind smooth and level with the finished grade. Rapid Resin Repair may also be shaped by scraping or cutting with a razor knife scrapper before reaching full set.

### CLEAN UP

Clean tools with Xylene or Acetone before the material has set. Excess Part A and Part B material should be mixed together and allowed to reach hard set, then discarded in the hardened form.

### LIMITATIONS

#### FOR PROFESSIONAL USE ONLY

New concrete must be at least 28 days old.

For temperatures below 10°F (-12.20C) kit contents should be preconditioned to 65°F - 85°F (18.30 - 29.40C).

Temperature of the substrate must be above -20°F (-28.9°C) during installation and for initial cure period.

Rapid Resin Repair is moisture sensitive and should not be installed on wet or damp concrete.

### PRECAUTIONS

#### READ MSDS PRIOR TO USING PRODUCT

- Component A – Irritant
- Component B – Corrosive
- Component "C" Irritant: Contains Portland cement.
- Product is a strong sensitizer
- Use with adequate ventilation
- Wear protective clothing, gloves and eye protection (Goggles, Safety Glasses and/or Face Shield)
- Keep out of the reach of children
- Do not take internally
- In case of ingestion, seek medical help immediately
- May cause skin irritation upon contact, especially prolonged or repeated. If skin contact occurs, wash immediately with soap and water and seek medical help as needed
- If eye contact occurs, flush immediately with clean water and seek medical help as needed
- Dispose of waste material in accordance with federal, state and local requirements
- Cured Epoxy Resins Are Innocuous

### MANUFACTURER

Dayton Superior Corporation  
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### WARRANTY

Dayton Superior Corporation ("Dayton") warrants for 12 months from the date of manufacture or for the duration of the published product shelf life, whichever is less, that at the time of shipment by Dayton, the product is free of manufacturing defects and conforms to Dayton's product properties in force on the date of acceptance by Dayton of the order. Dayton shall only be liable under this warranty if the product has been applied, used, and stored in accordance with Dayton's instructions, especially surface preparation and installation, in force on the date of acceptance by Dayton of the order. The purchaser must examine the product when received and promptly notify Dayton in writing of any non-conformity before the product is used and no later than 30 days after such non-conformity is first discovered. If Dayton, in its sole discretion, determines that the product breached the above warranty, it will, in its sole discretion, replace the non-conforming product, refund the purchase price or issue a credit in the amount of the purchase price. This is the sole and exclusive remedy for breach of this warranty. Only a Dayton officer is authorized to modify this warranty. The information in this data sheet supersedes all other sales information received by the customer during the sales process. **THE FOREGOING WARRANTY SHALL BE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ALL OTHER WARRANTIES OTHERWISE ARISING BY OPERATION OF LAW, COURSE OF DEALING, CUSTOM, TRADE OR OTHERWISE.**

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