#### TECHNICAL DATA

# **POLY FIX®**

Ultra-Low Viscosity Polymer Concrete Repair Binder

## **DESCRIPTION**

Poly Fix® is a high-strength, two-component ultra-low viscosity hybrid polyurethane concrete repair binder. Poly Fix® can be used to penetrate hairline cracks or mixed with dry sand to patch/repair concrete spalls or control joints. Poly Fix®'s water-like consistency also makes it an excellent crack healer/sealer for deteriorated concrete surfaces. Poly Fix® contains 0 VOC's.

#### **Primary Applications for Poly Fix® are:**

- Bridge Decks/Parking Decks
- Auto/truck repair bays
- Concrete crack healer/sealer
- Concrete subjected to mild chemical attack
- Anchoring bolts, railings, equipment
- Floor restoration projects
- Repairing spalls and pop-outs
- Freezer floors and low temperature repairs

# **FEATURES/BENEFITS**

- Easy 1 to 1 mix ratio
- Penetrates concrete to seal against liquid absorption
- Excellent resistance to a variety of chemicals
- Dark amber color when mixed, dries gray
- Cures in 10 min @ 75F
- Structurally restores concrete surfaces
- Tough permanent repairs
- VOC compliant (0 VOC's)

#### **APPEARANCE**

POLY FIX® is a 2-part hybrid polyurethane system consisting of a Part A & Part B. This product, when mixed or dispensed, will be an amber black and dries to a gray color. The finished color can be changed by using different colored sands or a secondary coating.

#### **COVERAGE/YIELD**

1 gallon of Poly Fix® when mixed with 2 gallons of dry 16/40 sand will yield approximately 2.2 gallons of cured polymer concrete.

Coverage rate depends on the porosity of the concrete.

#### **APPLICATION**

<u>Surface Preparation</u>: All concrete to be repaired must be clean, <u>dry</u> and sound. New Concrete must be a minimum of 30 days old. All contaminants, oil, debris, coatings and unsound concrete must be removed.

Cracks should be prepared with a crack chaser, dry diamond blade, wire wheel on a hand grinder or a wire brush. The crack must be thoroughly cleaned with a vacuum to remove all dust and debris.

Larger joint repairs or patching applications must be properly prepared with a chipping hammer, needle gun or diamond grinder. A dry surface profile meeting ICRI CSP 3 is recommended. Large repairs subjected to heavy forklifts should have the perimeter recessed a min of 1/8"

# **APPLICATION** (con't)

Cartridge Mixing: Poly Fix® should be conditioned to a temperature of 60°F to 80°F. Thoroughly shake the cartridge for 30 sec to mix each component. Remove the cap and while holding upright, attach the flow restrictor to the cartridge then the static mixer with nut. Insert into dual cartridge gun and point the static mixer into a waste container and dispense 4-5 inches of material to assure proper mix. Once dispensing has started, do not turn upright to prevent backflow. Immediately apply the mixed material to the repair area.

Bulk Mixing: Poly Fix® is a very rapid-setting product. Therefore larger bulk units (2gal & 10gal) should be mixed in quart batches. Mix 1 pint Part A with 1 pint Part B for 30 sec then add up to 2 quarts of dry sand or use SpecPoxy Mortar Part C, mix for an additional 15 sec and immediately place into the prepared repair area.

Placement: For cracks or patching repairs greater than 3/4" wide. Pre-wet the area with Poly Fix® and fill with coarse dry sand (16/40) or use SpecPoxy Mortar Part C to the proper elevation. Immediately saturate the sand with Poly Fix®, making sure to saturate the sand down to the primed substrate. Apply additional sand if necessary and distribute and finish with a trowel to the desired texture. As the Poly Fix® cures and hardens it will turn gray. If necessary, sanding, grinding or polishing can begin 1-3 hours after final cure.

Low Temperature Repairs: Condition Poly fix and any other materials (sand) to 70°F before mixing and applying to prepared substate. Cure time will be extended depending on the application temperature.

## **TYPICAL TECHNICAL DATA**

The following results were developed under laboratory conditions:

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Cured Color	Gray
Gel Time @ 70° F	3-4 min.
Pot Life @ 70° F	6-8 min.
Set time @ 70°F,	10-15 min.
Compressive Strength (with sand)	4650 psi
% Elongation (ASTM D638)	5%
Durometer Hardness	72 Shore D
Mixed Viscosity	60 cps
Application Range	0°-100°F



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#### **CLEAN UP**

Clean uncured Poly Fix® tools and equipment with solvent such as SpecChem SOLVENT 100. Do not allow to harden on equipment.

## LIMITATIONS/PRECAUTIONS

- Poly Fix must be thoroughly mixed to completely disperse the pigment. This is especially important with the cartridges. Improper mixing/pigment dispersion may result in a white appearance for the cured Poly Fix
- Poly Fix® is a rigid material and should not be use in moving cracks or joints
- Only apply to concrete free of moisture
- Store indoors at 45°F to 90°F.
- Product may discolor in outdoor (strong sunlight) environments
- When using a cartridge, do not hold vertical after pumping to prevent backflow into the cartridge. If material hardens in the mixer, detach and replace with new mixer
- Components may cause irritation. Avoid contact with eyes and skin
- Apply only over dry concrete surfaces
- If HVAC intake ducts will distribute odor into adjoining occupied areas of the building, care should be taken to block these ventilation vents.

DO NOT EXPOSE TO OR APPLY NEAR FIRE OR FLAMES.

FOR WELL VENTILATED INTERIOR OR EXTERIOR USE ONLY!

# SPECIFICATIONS/COMPLIANCES

POLY FIX® is USDA accepted for indirect use in federally inspected meat and poultry plants

# **PACKAGING**

22 fl-oz Cartridges (12 per case)
Quart units (12 per case)
2 gallon units

## **SHELF LIFE**

Store Poly Fix® in its original containers and keep tightly closed. **Do Not Allow to Freeze!** Do not allow any moisture or the accumulation of water, dirt or other contaminants. The shelf life of properly stored Poly Fix® is 9 months from date of manufacture.

#### 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.



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