

PRODUCT DATA SHEET: PPC™ “EASY” PATCH STANDARD MIX

PRODUCT DESCRIPTION

PPC™ **“EASY”** Patch is Kwik Bond’s polyester-based polymer patching kit designed for durable, rapid setting, patch applications. PPC™ Patch achieves over 3500 psi in compressive strength within 24 hours as well as over 850 psi in tensile strength. Because of its strength gain curve, traffic can be safely returned usually within 1-2 hours at temperatures of down to 35 F.

PPC™ Patch has the following performance advantages.

- 1) Superior Adhesion
- 2) Adjustable speed of set
- 3) Long performance history in all kinds of environmental conditions
- 4) Easy Mix.

For today’s congested bridges and highways, PPC™ Patch is the right material for patching, repairing, and rehabilitating Portland Cement Concrete pavement and bridge decks.

SPECIAL FEATURES

- Low viscosity for easy mixing
- Simple packaging
- Pre-Measured Materials
- Rapid curing and strength development
- Excellent adhesion to Portland Cement Concrete, LMC, Silica Fume concrete even under damp conditions
- Easy placement and finishing

PPC™ 1121 Binder Resin	
Weight per gallon (resin binder only)	8.75-9.17 lbs./gal
Viscosity	<200 cps
Flash Point (Seta Flash)	90° F
Adhesion (Caltran Test Method 551)	>500 psi
Tensile Strength (ASTM D-638, ¼” specimen)	2500 psi
Tensile Elongation (ASTM D-638, ¼” specimen)	35% min.
Meets CARB	
Styrene Content	40-50%
Physical Properties – PPC-1121 Compressive Strength (ASTM c-39 at 24 hours)	>4000 psi
Tensile Strength (ASTM c-307-PPCTM – system)	850 psi
Cured Density (ASTM C905)	135 lbs./cu.ft.

TYPICAL AGGREGATE GRADATION		
Screen Size		% Passing
3/8"	9.5mm	100
NO. 4	4.75mm	70
NO. 8	2.36mm	50
NO. 16	1.18mm	44
NO. 30	600um	30
NO. 50	300um	9
NO. 100	150um	1.5
NO. 200	75um	T

APPLICATIONS

- Rapid Patch-Roadways/Bridges
- Expansion Dams
- Small Overlay Areas
- Variable grade adjustments
- Colors – Natural or Gray (5 Gallon Kit only)

SURFACE PREPARATION

Chipping, sand-blasting, sweeping and/or other cleaning processes are required to provide proper surface preparation for a long-lasting polymer patch application. The final surface should be clean, free of oils, dirt, curing compounds, and other materials that may affect the adhesion of the polymer system. Unsound concrete areas should be located and removed as part of the surface preparation process.

Typical Patching Application Steps

- 1) Saw cut (dry blade) a minimum ¾” depth shoulder around the edge of the prepared area
- 2) Chip out delaminated materials
- 3) Blow off (sweep away) dust from saw cutting operations
- 4) Mix materials together. See ‘System Installation’ section for mix design details.
- 5) Use Some of the mixed resin to wet spall surface
- 6) Fill the prepared area to rough grade with “EASY” patch material; screed to final grade
- 7) Texture finished surface with No. 8 sandblast sand, broom or tine finish

Note: For patching Portland Cement Concrete on-grade pavement, construction joints must be isolated using polyethylene foam or equivalent material. The integrity of the joint must be maintained. Transverse cracks, typically, behave as joints and must be isolated from one side of the crack to the other.

SYSTEM INSTALLATION

Since all components are pre-measured, follow this simple procedure:

- 1) Take metal can of pre-weighed PPC™ 1121 Binder Resin and add to a clean, 5 gallon plastic bucket
- 2) Next Pour contents of small bottle of peroxide catalyst into the resin filled bucket
- 3) Agitate with a battery-powered drill motor mixer or equivalent for 30 seconds
- 4) Using a simple kitchen type brush, take a little of the catalyzed resin and scrub into the prepared area to be patched.
- 5) Add the pre-weighed aggregate incrementally while mixing.
- 6) Once all of the aggregates are thoroughly wetted with resin and formed a flowable mix, dump the material into the spill area, rod, and strike-off to the finished grade. Working time will vary from 10-30 minutes depending on temperature.
- 7) Utilizing a Schmidt Hammer, open to traffic when a rebound number of 22 or greater is achieved.

PACKAGING

- 5 Gallon Pre-packaged 0.43 cubic feet

SAFETY

PPC™ “EASY” Patch consists of polymer materials that have been used safely for over 20 years. However, there are certain safety issues that need to be readily understood. PPC™ 1121 Binder Resin is FLAMMABLE! Fire extinguishers should be available as part of emergency planning. Emergency situations are unlikely, but preparation is always SMART!

MEKP peroxide is a strong oxidizing agent. Wear protective gloves, clothing and eye protection to prevent accidental splashing in eyes or on skin. Have clean fresh water available to wash away accidental contact with this material. Handle it with appropriate care. For emergency situations, always have available clean water for accidental contact in the eyes, fire extinguishers, and emergency center addresses, phone numbers.

Organic vapor respirators are not *normally* required. For individuals sensitive to chemical vapors, organic vapor respirators are suggested for comfort and minimize effects of those allergic to certain fuming materials.

STORAGE

PPC™ “EASY” Patch kits should be stored in their original, un-opened condition. The shelf life for these materials stored at temperatures 80 F and below is a minimum of 12 months. At elevated temperature, storage shelf life may be reduced. Materials must be stored in a clean and dry location.

The technical data furnished is true and accurate to the best of our knowledge. However, no guarantee of accuracy is given or implied. We suggest that customers evaluate these recommendations and suggestions in conjunction with their specific application. Kwik Bond Polymers, LLC warrants its products to be free from manufacturing defects conforming to its most recent material specifications. In the event of defective materials, Kwik Bond Polymers, LLC's liability will be limited to the replacement of material or the material value only at the sole discretion of Kwik Bond Polymers, LLC. Kwik Bond Polymers, LLC assumes no responsibility for coverage, suitability of application, performance or injuries resulting from use. 6-15-2010