

CCS™ QUIKPRIME

FOR DAMP OR WET SUBSTRATE OR GREEN CONCRETE

CCS QuikPrime is a versatile high performance two component, solvent free, epoxy designed for prime coating dry and damp surfaces in preparation for installation of ChemCo's polyurea and epoxy products under difficult application conditions including 24 hour concrete. The product's short cure cycle, tolerance of surface dampness, high bond strengths, low viscosity and excellent cold weather performance make it ideally suited as a primer. QuikPrime significantly improves the bond strength of the topcoat to the substrate. The product has a convenient 2:1 mix ratio and does not contain volatile solvents (VOC's). Typical applications include the prime coating of concrete, steel, wood and FRP substrates in rebuilding damaged joint nosing, repairing spalled and deteriorated concrete and sealing non-structural cracks in concrete. Determination of the bond strength of QuikPrime + topcoat to the prepared substrate, particularly under low temperature, damp conditions prior to installation is recommended. Note: QuikPrime was formerly named Polyurea Primer.

FEATURES

- Convenient 2: 1, by vol. mix ratio
- Fast cure for short downtime
- Bonds to dry, damp and wet substrates
- Bonds to green concrete
- Works at temperatures down to 35 °F
- Resists road, auto and aircraft chemicals
- Environmentally safe - No VOC solvents

LIMITATIONS: Primer coat must be allowed to cure to a set but still tacky condition before applying topcoat. Excess water film should be removed prior to primer application. Minimum installation temperature is 35 °F. Note that cure times will be significantly longer at colder temperatures. Apply the primer after the daily substrate maximum temperature has been reached. Caution should be exercised on green concrete, QuikPrime should be applied no sooner than 24 hours after placement (test evaluation is strongly recommended). Green concrete must be able to tolerate a vapor barrier early in the cure cycle. Do not add solvents or thin this material.

PACKAGING & COLORS: Standard package sizes of Part A + Part B are 3 and 15 gallons. Color is clear amber; custom colors available.

SHELF LIFE: Three years minimum in unopened, original containers when stored between 60 and 90 °F in a dry place away from sunlight. Remixing of components may be required upon prolonged storage.

CHEMICAL RESISTANCE: Resistant to a wide range of commonly used deicing chemicals and aircraft and automotive fluids. It has limited resistance to hydrocarbon solvents. Performance is a function of the specific chemical and concentration, ambient and solution temperatures, exposure times and housekeeping procedures. For information on specific chemicals and exposure conditions, contact a ChemCo Systems, Inc., technical representative.

SURFACE PREPARATION: Concrete surfaces must be sound and free of all bond-inhibiting substances. Wet surfaces must be dried to no surface film of water prior to application of QuikPrime. If surface drying of wet substrates is not practical, use hand pressure or multi-directional scrubbing action to ensure all water is displaced between substrate and epoxy for optimum bonding. Prepare surfaces for bonding in accordance with *ASTM D 4259* or *ACI 503R* and ChemCo Systems' specific recommendations. Properly prepared concrete surfaces should have a minimum strength of 250 psi in direct tension. Steel surfaces should be cleaned to white metal according to SSPC SP 5.

MIXING: QuikPrime is a two-component adhesive. The resin to hardener (Part A: Part B) mix ratio is 2:1, by volume. Read Material Safety Data Sheet (MSDS) information before handling the product, wear safety glasses and rubber gloves when handling the materials. Premix the individual components before drawing from bulk packaging. Transfer the appropriate quantities of Part A and Part B into a mixing container. Mix thoroughly using a Jiffy mixer blade attached to a low speed (350 - 750 rpm) electric or pneumatic drill. Proper mixing will take 2 - 3 minutes. Pour the mixed primer onto the substrate or into a shallow tray (extends working life by reducing the build-up of exothermic heat). Take care to mix only the material that can be used within the gel time. In hot ambient temperatures, keep the product components in air-conditioned or cooled storage for maximum useful mixed life.

INSTALLING: Prime the substrate with mixed QuikPrime. The recommended primer thickness is 8 - 10 mils (160 - 200 sq ft/gal). Apply the topcoat neat binder, mortar, concrete or flowable grout to the primed substrate when the primer is set but still tacky (approx. 4 - 5 hr @ 50 °F, 1 - 1.5 hr @ 75 °F and .75 - 1 hr @ 90 °F). Clean application tools frequently.

CLEAN UP: Excess mixed product is best removed from the work area and tools before it hardens. Use of rags and solvents such as acetone or heavy-duty detergents facilitate cleaning. Cured product may be removed from tools by soaking in an epoxy stripper.

TYPICAL PROPERTIES ⁽¹⁾

PROPERTY ⁽²⁾	TEST METHOD	VALUE
MIX RATIO, A:B,	BY VOL	2 : 1
	BY WT	100 : 44
COLOR:	PART A	CLEAR AMBER
	PART B	CLEAR AMBER
	MIXED	CLEAR AMBER
WEIGHT PER GALLON, LB	PART A	9.5
	PART B	8.3
	MIXED	9.1
VISCOSITY, CP:	PART A	300
	PART B	150
	MIXED	250
GEL TIME, 100 G, MINUTES	ASTM D 2471	15
PRIMER CURE TIME, MINIMUM, HOURS (3)	ASTM D 4541	
	@ 50° F	4.0
	@ 73° F	1.5
	@ 90° F	.75
TENSILE STRENGTH, PSI	ASTM D 638	10200
ELONGATION AT BREAK, %	ASTM D 638	2.0
BOND STRENGTH OF POLYUREA TO PRIME COATED	ASTM D 4541	
	DRY	CEMENT MORTAR FAILURE (4)
ASTM C 109 CEMENT MORTAR: WITH POLYUREA PRIMER, PSI	DAMP	300 (4)

- (1) THE PROPERTIES LISTED ARE TYPICAL AND DESCRIPTIVE OF THE PRODUCT AND SHOULD NOT BE USED FOR SPECIFICATION PURPOSES. FOR SPECIFICATION PREPARATION, REFERENCE THE CHEMCO SYSTEMS, INC., PRODUCT GUIDELINE SPECIFICATION.
- (2) CURE SCHEDULE, 7 DAYS AT 73° ± 4 F AND TEST TEMPERATURE, 73° ± 4 F.
- (3) MINIMUM PRIMER CURE TIME BEFORE APPLICATION OF TOP COAT.
- (4) PRIMER COAT CURE SCHEDULE, 1.75 HR @ 73° ± 4 F BEFORE APPLICATION OF TOP COAT. COMPRESSIVE STRENGTH OF CEMENT MORTAR, 4500 PSI

HANDLING AND TOXICITY: This bulletin does not accompany the product when sold. For hazard warnings, safe handling and first aid instructions, CAREFULLY READ THE MATERIAL SAFETY DATA SHEETS AND CONTAINER WARNING LABELS.

Part A: Liquid epoxy resin, HMIS Health Hazard Rating - 2 (Moderate Hazard). Warning! Causes eye and skin irritation. May cause allergic skin reaction. Harmful if swallowed. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Avoid prolonged or repeated contact with skin.

Part B: Liquid epoxy hardener, HMIS Health Hazard Rating - 3 (Serious Hazard). Contains alkaline amines. Danger! Causes severe eye and skin burns. May cause allergic skin and respiratory reaction. Combustible, corrosive. Do not get in eyes or skin or on clothing. Avoid breathing vapor. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Keep away from heat and open flame.

DISCLAIMER: NO EXPRESS WARRANTY IS MADE WITH RESPECT TO THE RESULTS OF ANY USE OF THIS PRODUCT. NO IMPLIED WARRANTIES, INCLUDING AND NOT LIMITED TO AN IMPLIED WARRANTY OF MERCHANTABILITY OR AN IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE ARE MADE WITH RESPECT TO THIS PRODUCT. NO LIABILITIES FOR PERSONAL INJURY, LOSS OR DAMAGE RESULTING FROM THE USE OF THIS PRODUCT IS ASSUMED. CHEMCO SYSTEMS, INC., RESERVES THE RIGHT TO ALTER OR DISCONTINUE THE PRODUCT DESCRIBED HEREIN AT ANY TIME AND WITHOUT PRIOR NOTICE.

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