

K A U F M A N

PRODUCT
INFORMATION

**KAUFMAN
PRODUCTS
INC.**

3811 CURTIS
AVENUE

BALTIMORE,
MARYLAND
21226-1131
www.kaufmanproducts.net

410-354-8600
800-637-6372

K Pro UC Systems

Description

K Pro Underwater Curing UC Systems are a line of 100% solids, special epoxy resins and a blend of many types of hardeners designed for application to surfaces underwater. They will protect surfaces underwater against corrosion, erosion and deterioration of concrete or wood at above and below the waterline in splash zones in either salt or fresh water. They can be used in many patching and grouting applications that are not submerged and on surfaces that subsequently will be buried in soil.

They cure to an extremely hard coating which is abrasion and impact resistant and which will protect against further erosion and corrosion.

Uses

K Pro UC Systems are a group of related products to be applied to concrete, steel, or wood surfaces when submerged in tidal or splash zone areas-as and above water, When encapsulated with fiberglass jackets, wrapped around cylindrical piles (placed against sheet piling, etc.) or brought together in halves for square columns, K Pro UC

Packaging

UC 223-225	7.5 Liters	(2 gal. unit)
	37.85 Liters	(10 gal. unit)
UC 221	11.36 Liters	(3 gal. unit)
	56.80 Liters	(15 gal. unit)

Specifications

ASTM C-881-90. Types I, II, IV & V, Grades 2 & 3, Class C
AASHTO M-235, Types I, II, IV & V, Grades 2 & 3, Class C

Directions

Surface Preparation

All surfaces must be clean, sound and free of all foreign matter. Sandblasting is preferred. High pressure water blasting is acceptable. Sandblasting underwater can be done, as the initial air blast will clear a path through the water for the sand/air mixture. When working in a splash zone or in salt water, coat cleaned metal surfaces as soon as possible to minimize new corrosion.

Typical Properties - 75°F

	221 UC BINDER	223 UC GEL	224 UC COATING Gray	225 UC COATING Red
Mix Ratio	2:1	1:1	1:1	1:1
Viscosity	~1800	Gel	15,000	15,000
Pot Life	33-38	25-35	25-35	25-35
Thinfilmm	NA	NA	4-5	4-5
Tack free (hrs)				
Final Cure	7 days	7 days	7 days	7 days

Mixing

Stir individual components. Combine Part A and Part B above water as stated in the directions on the individual products. Mix thoroughly with a 1/2" drill equipped with a "Jiffy" type mixer.

For putty, mix "golf-ball" to "baseball" sized quantities of each, and knead together by hand (using rubber gloves). Keep hands and material wet with water during mixing. Mix until uniform in color.

Application

Coating: Apply with roller or brush. For best results, apply one coat of K Pro UC Coating at approximately 80-100 ft²/gal. working the coating into the pores in order to expel standing water from the surface.

Follow with second coat of K Pro UC Coating applied at 100-120 ft²/gal. Two coats are recommended.

Grout: Add SurePoxy Mortar Aggregate to already mixed K Pro UC Binder in the ratio of 3-5 volumes of aggregate to 1 volume of pre-mixed Binder. When mixed at a 5:1 ratio of 200 lbs. of SurePoxy Mortar Aggregate with one 3-gallon unit of K Pro UC Binder will yield 2,772 in³ or 12 gallons of epoxy mortar. For large quantities a mortar mixer can be used. Pour in place on horizontal surfaces or in preformed space on vertical surfaces.

Normally a fiberglass jacket is wrapped around a cylindrical pile or brought together in halves for square concrete columns leaving an annular space of 1/4" – 1/2" between the piling and jacket. A sealing system of K Pro UC Gel is placed at the bottom of the jacket, so that the grout will not flow out of the bottom. The K Pro UC Grout is then poured into the top of the jacket down through the

water to fill the annular space. It can also be pumped or gravity flowed through ports at the bottom of the jacket. This grout is designed to cure slowly to allow plenty of time to mix and place. Once cured, the grout creates a strong, impervious barrier adhering to the substrate.

Gel: Mix 1 part SurePoxy Gel Aggregate to each part UC Gel. The K Pro UC Gel is applied by trowel or putty knife to the bottom of the form to

Note

UC products cling to the substrate and withstand moderate wave and tidal action while curing. Strong wave action requires protection, such as placing a barge or other vessel alongside the work area. Do not apply to surfaces where vapors can condense under coating and freeze. Do not completely encapsulate saturated concrete or mortar. Pot lives vary due to different temperatures. Store this product 40-90°F. If stored below 45°F some lumps appear in the B component, but disappear after combining with component A and does not harm the product. Do not thin. Read Safety Data Sheet before using. Please refer to the *General Epoxy Instructions* for complete details on proper application during cold and hot weather.

Technical Information

The following results were achieved under laboratory conditions. Statistical variations will occur based upon mixing methods, temperature & humidity, test methodology, site conditions, curing conditions, application methods, and equipment.

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