

PRODUCT INFORMATION

KAUFMAN PRODUCTS INC. 3811 CURTIS AVENUE BALTIMORE, MARYLAND 21226-1131 410-354-8600 800-637-6372 www.kaufman products.net

HiCap UW

Description

HiCap UW is a quick setting, cementitious patching and finishing compound that is chemically engineered for use underwater in fresh, brackish, or salt water environments. HiCap UW may be packed by hand or with the use of a trowel. HiCap UW may be placed down to a featheredge, and can even be shaved after achieving an initial set. HiCap UW is composed of special portland cements, graded and washed silica aggregates, accelerating additives, an anti-washout admixture, a migratory corrosion inhibiting agent, workability agents and water reducing agents. The true benefit of HiCap UW is in the extended working time, which allows the product to be easily mixed on a dock or barge, and then transported by a diver to the location of the repair without setting up prior to application.

Uses

HiCap UW is ideal for use in marine environments, such as below grade and underwater repairs. HiCap UW may be mixed in a dry environment, and then taken underwater and applied. HiCap UW may be applied in horizontal, vertical, and overhead applications. Typical applications include: dams, piers, pile repairs, seawalls, sewer pipe, tunnels, and other underwater applications.

Packaging/Yield

50 pound pail .45 ft³ 50 pound bag .45 ft³

Directions

Surface Preparation

Surfaces must be structurally sound, clean, and free of loose or deteriorated concrete, rust, marine growth, oily materials and all contaminants. Undercut all edges of the area to a minimum depth of ¼". Mechanically abrade the concrete surface to achieve a Concrete Surface Profile (CSP) of a minimum of 4 as per International Concrete Repair Institute (ICRI) Guidelines. Clean all exposed steel and reinforcing.

Application

Mix 50 lbs. of HiCap UW with 4.25-4.75 quarts of POTABLE WATER. It is beneficial to mix all of the water with 50% of HiCap UW, and then slowly add the remaining powder to make certain that all ingredients are properly wetted out. Thoroughly mix until uniformly blended but no more than 3-5

Physical Properties - 75°F	
Initial Set	20-25 minutes
Compressive Strength (ASTM C-109)	1 day 2,700 psi 7 days 4,500 psi 28 days 5,800 psi
Flexural Strength (ASTM C-348)	28 days 680 psi
Slant Shear Bond Strength (ASTM C-1042)	1 day 1,030 psi 7 days 1,570 psi
Percent Length Change In Air (ASTM C-928)	7 days -0.08% 28 days -0.14%
Freeze Thaw Durability @ 300 (ASTM C-666, Procedure A)	Cycles 98.4%

minutes. The use of a low RPM (1/2" drill) and a mud paddle is recommended. Do not re-temper or add sand to this mix. Do not ever add plasticizers, accelerators, retarders, or any other ingredients besides potable water unless advised by Kaufman Products in writing.

Scrub HiCap UW intimately into the pores of the roughened surfaces with a gloved hand, then pack the rest of the area with the mixed material immediately. HiCap UW may also be applied by trowel. If shaving to a desired angle is desired, then allow HiCap UW to set for 30-60 minutes, and then shave to the desired shape. Always shave toward the common bonding edge between HiCap UW and the surrounding area after finishing; HiCap UW may be applied from featheredge up to 3" deep.

Notes

Never retemper. Application should always be finished by the time of initial set or stiffening. Read Safety Data Sheet before using.

Technical Information

Test 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.