



OCTOCRETE U

A Fast Setting Concrete Repair Mortar for Underwater Use

OCTOCRETE U – Product Data Sheet

Dry Polymer Modified Underwater Repair Mortar

Description:

OCTOCRETE U is a single component, ready to use with water, quick set, high strength polymer modified cementitious patching mortar for horizontal and vertical repair of concrete and masonry under water.

Advantages:

- ◆ Superior physical properties to conventional Portland cement mortars
- ◆ Excellent adhesion *
- ◆ Coefficient of expansion similar to concrete
- ◆ Excellent resistance to de-icing chemicals
- ◆ Excellent workability results in labor savings
- ◆ Hangs up in thick layers to speed vertical and overhead repairs *
- ◆ Repaired areas will breathe
- ◆ Excellent freeze-thaw resistance
- ◆ Sets in 6 minutes at 70°F (21°C)

* For extra bond strength, add one gallon (3.8 L) of IPA Systems **OCTOBLEN** (Bonding Agent) per 50 pound (22.7 kg) bag in place of one gallon (3.8 L) of mixing water.

TECHNICAL DATA

Packaging: 50 lb. (22.7 kg) bag; 55 gallon (208.2 L) drum

Yield: A 50 lb. (22.7 kg) bag of **OCTOCRETE U** yields about 0.5 cubic feet (0.01 m³) of material

Shelf Life: One year in unopened bag. Requires dry storage

Color: Concrete Gray

Initial Set Time: **OCTOCRETE U** sets in 5 to 6 minutes at 70°F (21°C)

Sculpture Time: For an additional 20 minutes after initial set, **OCTOCRETE U** can be formed (shaved) by the edge of a trowel. The finisher can shape (shave) the contour during this period of time.

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Underwater Application:

Surface to be repaired must be sound and all loose material must be removed. **OCTOCRETE U** is designed to set in 6 minutes and must be placed in area to be patched within 6 minutes after mixing. Mix ratio is one 50 pound (22.7 kg) bag per 5 quarts (4.7 L) of water. Mix only as much material as can easily be used in 6 minutes. Mix powder with water and wait 2 to 4 minutes before placing underwater according to the depth of patch area below the water surface. Pack all material quickly and firmly into patch area making sure to displace all trapped air and water out of patch. Once **OCTOCRETE U** sets, no deterioration will occur.

Clean-up:

Cleanup must be done immediately due to the high bonding characteristics of **OCTOCRETE U**. Clean equipment with water.

Physical Properties:

Compressive Strength ASTM C-109	1 day	Exceeds 2800 psi (19.3 MPa)
	7 day	Exceeds 4600 psi (31.7 MPa)
	28 day	Exceeds 5800 psi (40 MPa)
Flexural Strength ASTM C 348	1 day	600 psi (4.1 MPa)
	7 day	750 psi (5.2 MPa)
	28 day	900 psi (6.2 MPa)
ASTM C 78	28 day	1500 psi (10.3 MPa)
Slant Shear Bond Strength ASTM C 882 (No epoxy used)	7 day	1190 psi (8.2 MPa)
	28 day	1640 psi (11.3 MPa)

Heat of Hydration: No appreciable heat of hydration.

Composition Characteristics: Contains no calcium chloride, added gypsum, or metals susceptible to corrosion, lime or high alumina cements.

Heat of Hydration: No appreciable heat of hydration.

Limitations:

Do not install **OCTOCRETE U** unless substrate, water and air temperatures are at least 40°F (4.4°C) and rising for the next 48 hours. Do not apply to a frozen surface. **DO NOT USE SOLVENT BASED CURING COMPOUNDS.** Care must be taken to insure proper concrete practices are used in preparation, mixing, placing and curing.

CAUTION – FOR INDUSTRIAL USE ONLY:

Freshly mixed cement, mortar, grout, or concrete may cause minor skin irritation. Avoid direct contact where possible and wash exposed skin areas promptly with water. If any of the cementitious material gets into the eyes, rinse immediately and repeatedly with water. If irritation persists, obtain medical assistance.

WARRANTY

This product is warranted and guaranteed to be of good quality. Manufacturer, as its sole and exclusive liability hereunder, will replace material if proved defective. THIS WARRANTY AND GUARANTEE ARE EXPRESSLY IN LIEU OF ALL OTHERS, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND MAY NOT BE EXTENDED BY REPRESENTATIVES OR ANY PERSONS, WRITTEN SALES INFORMATION, OR DRAWINGS IN ANY MANNER WHATSOEVER.

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