

DESCRIPTION

CANTOL REGULAR MORTAR is a three component 100% solids epoxy mortar designed for applications where excellent wear characteristics and strength are required.

FEATURES

- Epoxy Durability
- 100% Solids
- No VOC's
- Abrasion Resistance
- Impact Resistant
- Easily Topcoated
- Self Priming
- Wear Resistant

DIRECTIONS

PRODUCT STORAGE:

- Store product in an area so as to bring the material to normal room temperature before using.
- Continuous storage should be above 55° F (12.77°C) to prevent product crystallization.

SURFACE PREPARATION:

- All dirt, oil, dust, foreign contaminants and laitance (fine particles on the surface of fresh concrete) must be removed to assure a trouble free bond to the substrate.
- We recommend that an aggressive shot blast be performed prior to the application of this product.
- A less adequate method would be acid etching with CANTOL ACI-TECH, but the etch should properly profile the substrate.
- All edges and around columns or beams should be mechanically scarified.
- All termination points should not be feather edged, but should be saw cut with the termination ending at the sawcut.
- All large cracks should be V cut and filled with an appropriate crack filler.
- All expansion joints should be filled with an appropriate joint filler.
- When overlaying an expansion joint, a single saw cut through the epoxy overlay would prevent random fracturing.
- A test should be made to determine that the concrete is dry; this can be done by placing a 4'x4' (1.22 X 1.22 meters) plastic sheet on the substrate and taping down the edges; if after 24 hours, the substrate is still dry below the plastic sheet, then the substrate is dry enough to start coating. The plastic sheet testing is also a good method to determine if any hydrostatic pressure problems exist that may later cause disbonding.

PRIMER:

No primer is necessary. This material is self priming. However, any suitable primer can be used.

PRODUCT MIXING:

- It is important that the liquids be mixed together first.
- Mix the liquids in an oversized container thoroughly and until streak free.
- After the liquids are thoroughly mixed, add in the aggregate.
- Mix in the aggregate with slow speed mixing equipment such as a jiffy mixer or rotating bucket/stationary mixing blade assembly.
- It is equally important that enough time is spent mixing in the aggregate to insure that the aggregate is thoroughly wetted out.
- No induction time is necessary.
- Improper mixing may result in product failure.

PRODUCT APPLICATION:

- Apply the mixed material at 1/8 to 1/4 inch (0.317 to 0.635 cm) thickness.
- Apply the material with a hand trowel or other suitable application equipment.
- Do not over-trowel the material as this may cause isolated blisters to form.
- Air currents directly across or above the mortar during the curing process may cause isolated blisters to form.
- Maintain temperatures within the recommended ranges during the application and curing process.

RECOAT OR TOPCOATING:

No recoating or topcoating is necessary. However, if you wish to topcoat the applied mortar, allow it to cure before topcoating. Many epoxies and urethanes can be used. Contact your Cantol representative for suitable topcoat selections.

CLEANUP:

Use xylol, xylene, toluene, paint thinner, mineral spirits.

FLOOR CLEANING:

Caution! Some cleaners may affect the color of the floor installed. Test each cleaner in a small area, utilizing your cleaning technique. Best to use CANTOL EF-90 detergent cleaner. If no ill effects are noted, you can continue to clean with the product and process tested.

RESTRICTIONS:

Restrict the use of the floor to light traffic and non-harsh chemicals until the coating is fully cured. It is best to let the floor remain dry for the full cure cycle (2-7 days).

APPLICATIONS

Recommended for heavy traffic areas, forklift traffic and steel wheel equipment production areas.

TECHNICAL DATA

Solids by weight: 100%

Volatile organic content: zero pounds per gallon (3.785 litres)

Standard colors: light gray, red, dark gray and natural.

Recommended thickness: 1/8" to 1/4" (0.317-0.635 cm)

Coverage per unit: 21.54 sq. ft. @ 1/4" (2.00 sq. m @ 0.317 cm) and 43.1 sq. ft. @ 1/8" (4.00 sq.m @ 0.635 cm).

Packaging	cubic feet
1/4 unit	0.11 (approx.)
unit	0.45 (approx.)
bulk unit	2.25 (approx.)

*UNIT = 9# (4.08kg) part A, 2.2# (0.99kg) part B, 50# (22.68kg) aggregate. A bulk is approximately five units (all weights approximate)

Mix ratio: UNIT = 0.96 -0.98 gallons (3.633 litres – 3.709 litres) part A to 0.26 gallons (0.984 litres) part B plus 50# (22.68kg) aggregate. (weight and volumes approximate)

Shelf life: 2 years in unopened containers

Flexural strength: 15,150 psi @ ASTM D790

Compressive strength: 11,150 psi @ ASTM D695

Tensile strength: 6,800 psi @ ASTM D638

Ultimate elongation: 4.65%

Impact resistance: excellent

Abrasion resistance: excellent

Heat deflection temp.: 70.5 C (158.9°F) @ ASTM D648

Weathering: good (chalks)

PRODUCT DATA

CANTOL 110 REGULAR MORTAR

Dot classification: Part A & C “not regulated”
Part B “CORROSIVE LIQUID N.O.S., 8, UN1760, PGIII”

Viscosity: Part A = 450-750 cps, Part B = 290-500 cps

CURE SCHEDULE:

Pot life (.45 Cu. Ft./0.0127 Cu. M. Mix30-40 minutes @ 70°F (21°C)
Recoat or topcoat 7-8 hours @ 70°F (21°C)
Light foot traffic 14-16 hours @ 70°F (21°C)
Full cure (heavy traffic)2-7 days @ 70°F (21°C)

APPLICATION TEMPERATURE:

55-90°F (12.77-32.29°C)

CHEMICAL RESISTANCE:

REAGENT	RATING
Acetic Acid 5%	C
Acetic Acid 10%	B
Acetone	B
Ammonia	C
Brake Fluid	B
Ethyl Alcohol	B
Ethylene Glycol Monomethyl Ether	A
Hydrochloric Acid 10%	C
Hydrochloric Acid 36%	B
Methanol	B
Methylene Chloride	A
Methyl Ethyl Ketone MEK	A
Nitric Acid 5%	C
Nitric Acid 30%	B
Phosphoric Acid 40%	B
Skydrol	B
Sodium Hydroxide 10%	C
Sodium Hydroxide 50%	C
Sulfuric Acid 10%	C
Sulfuric Acid 30%	C
Sulfuric Acid 98%	A
Water	E
Xylene	B

Rating key: A - not recommended, B - 2 hour term splash spill, C - 8 hour term splash spill, D - 72 hour immersion, E - long term immersion.

PRIMER:

None required

TOPCOAT:

None required. For increased performance and reduced porosity, see your Cantol representative for the correct topcoat.

LIMITATIONS:

- * Color stability may be affected by environmental conditions such as high humidity or chemical exposure.
- * Epoxy products are not UV color stable and may discolor if exposed to certain types of light such as sodium vapor lighting.
- * Colors may vary from batch to batch due to variations in the silica filler.
- * Mortar colors are not from our standard color chart.
- * Substrate temperature must be 50° F (3°C) above dew point (temperature at which the air becomes saturated...or 100% humidity)
- * For chemical exposure areas, we recommend a suitable topcoat to reduce porosity and chemical migration.
- * All new concrete must be cured for at least 30 days prior to application.

PRECAUTIONS

PART A: **WARNING:** Causes irritation. Avoid contact with skin and eyes. Use with adequate ventilation. Wear goggles when using. Wear gloves impervious to chemicals. Wash thoroughly after handling. Keep away from heat, sparks and open flame. Close container after each use. May cause skin sensitization. **FIRST AID:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Seek prompt medical attention. Flush skin with soap and water. If ingested, do not induce vomiting. Call a physician. Inhalation: remove to fresh air.

PART B: **DANGER: CORROSIVE.** Avoid contact with skin and eyes. Use with adequate ventilation. Wear goggles when using. Wash thoroughly after handling. Keep away from heat, sparks, and open flame. Close container after each use. May cause skin sensitization. **FIRST AID:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Seek prompt medical attention. Flush skin with soap and water. If ingested, do not induce vomiting. Call a physician. Inhalation: remove to fresh air. For industrial and institutional use only. **KEEP OUT OF THE REACH OF CHILDREN.** See Material Safety Data Sheet (MSDS) for more complete information.

GUARANTEE

Cantol guarantees its products, when used as directed, to do all it claims. Should the product fail to demonstrate our claims, the remaining material may be returned to us and no charge will be made.