

Cold Cure Epoxy



PRODUCT NAME

Cold Cure Epoxy

MANUFACTURER

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PRODUCT DESCRIPTION

UDT's Cold Cure Epoxy is a two-component, 100% solids, pre-pigmented epoxy coating designed specifically for cold-temperature environments. Cold Cure Epoxy is a cold-temperature alternative to the MC Epoxy product line (Standard Cure and Fast Cure).

Cold Cure Epoxy is frequently used as a "primer coat" and "body coat" for Chip, Quartz & Metallic systems as well as a stand-alone industrial epoxy system.

UNIQUE ADVANTAGES

- Cures down to 35°F
- Economical
- Fast drying
- Very hard / durable
- Low odor for use in occupied areas
- For use in high traffic areas

PROVEN INDUSTRIES

Commercial: stadiums, restaurants, kitchens, restrooms

Institutional: corridors, loading docks, storage facilities

Government: Armed Forces bases, parking garages

Residential: garages and decorative concrete floors

Industrial: warehouse, production areas, mechanic shops

PACKAGING

2 components, 2:1 ratio (2 Parts A: 1 Part B)

3-gallon Kit: 2 x 1-gal. can Part A + 1 x 1-gal. can Part B

15-gallon Kit: 2 x 5-gal. pail Part A + 1 x 5-gal. pail Part B

COVERAGE RATES

Average coverage rate: 80-320 SF / gallon (5-20 mils).

Thin-film primer coverage: up to 800 SF / gallon (2 mils).

Texture, absorption of surface and application processes will determine final coverage rates. Rough or porous concrete may require additional material.

SHELF LIFE

12 months, unopened when stored at room temperature (59-77°F, 15-25°C)

TECHNICAL DATA

Solids content	98% +/-2%	ASTM D2369
Volatile Organic Content (VOC)	19 g/l	calculated
Gloss @ 60° angle	95°-105°	ASTM D523
Mixed viscosity @77°C	1000-1200 cps	ASTM 2196
Taber Abrasion (CS-17, 1000 cycles)	52 mg loss	ASTM D4060
Impact Resistance	60%	ASTM D6905
König Hardness	145	ASTM D4366
Pull-off Adhesion	concrete failure	ASTM D7234
Gel time @60°F	15 minutes (1-gal. mass)	calculated
Re-coat window	24 hours	
Dry time @ 60°F	4 hours	calculated
Dry time @ 50°F	7 hours	calculated
Dry time @ 40°F	12 hours	calculated
Dry time @ 35°F	18 hours	calculated
Chemical resistant	3 days	calculated
Full cure	7 days	calculated

COLORS



Silver Gray



Tumbleweed

This color chart should be used for reference purposes only. For a true color match requirement, request a physical color sample from UDT.



ENVIRONMENTAL TESTING

Moisture Content: All interior concrete floors not poured over an effective moisture vapor retarder are subject to possible moisture vapor transmission that may lead to blistering and failure of the coating system. It is the coating applicator's responsibility to conduct calcium chloride testing (ASTM F1869) or plastic sheet testing (ASTM D4263) and relative humidity probe testing (ASTM F2170) to determine if excessive levels of moisture vapor emissions are present before applying any coatings.

Slabs on grade shall have a moisture vapor emission rate of less than 3 pounds / 1,000 sf / 24 hours when measured by calcium chloride test and less than 75% relative humidity when measured using in situ probes.

Test the air temperature, relative humidity, and floor temperature in the area to be finished using a Psychrometer and Infrared Thermometer.

Air Temperature: Cold Cure Epoxy SHALL NOT be applied when the air temperature is above 70°F or below 32°F.

Relative Humidity (RH): Cold Cure Epoxy SHALL NOT be applied when the RH is above 80%.

Floor Temperature and Dew Point: Cold Cure Epoxy SHALL NOT be applied when the substrate (floor) temperature is less than 5° above the dew point (See DEW POINT CALCULATION CHART). Monitoring the substrate temperature, indoor temperature, and RH, and utilizing fans and/or dehumidifiers as needed will help correct or prevent existing or possible dew point conditions until the installation is complete. All substrates must be prepared by trained or experienced contractors or maintenance personnel. UDT and its representatives or sales agents will not be responsible for coating failures due to improper preparation processes, undetected moisture vapor emissions, or other unacceptable environmental conditions.

FLOOR PREPARATION

Concrete shall be lightly shot-blasted or diamond ground with 30-80 grit metal bond diamonds to achieve a minimum of CSP 2 - CSP 3 concrete surface profile. Concrete must be cured prior to coating (poured and aged at a material temp of at least 75°F for at least 30 days), structurally sound, and free of contaminants including but not limited to waxes, loose paint, dust, dirt, grime, oils, release agents, curing compounds, and any surface laitance (a layer of weak and nondurable material). If prepared concrete is suspected to be contaminated with any of these materials, test for their presence by spraying a thin coat of water onto the concrete. If water beads on the surface, contamination is likely present and the concrete should be scrubbed with a degreaser or mild detergent, rinsed with clean water, and allowed to thoroughly dry prior to coating.

MIXING INSTRUCTIONS

Prior to mixing, ensure that the air, substrate and Parts A and B are between 35° - 60°F (2° -16°C). Parts A and B should be conditioned to within 10 degrees of the air and substrate temperature. Mix quantity that will be used within working time (15 minutes at 60°F).

- 1) Wear gloves and safety glasses when mixing.
- 2) Pre-mix part A for 1 minute.

3) By volume, pour out two (2) parts A into a separate mixing container.

• **Optional** - Add UDT Epoxy Patch Additive and mix for 3 minutes.

4) Add 5-25% xylene

5) Add one (1) part B to the mixing container and drill-mix on low-speed for 3 minutes.

6) Immediately pour all contents onto the floor and complete spreading and rolling within 15 minutes.

APPLICATION INSTRUCTIONS

While a primer coat is optional for chip-flake, aggregate and metallic systems, UDT recommends a thin primer coat of Cold Cure Epoxy to minimize bubbles caused from concrete outgassing and ensure optimal adhesion to the concrete surface. For Cold Cure Epoxy direct-to-concrete, body coats, and grout coats; dip and roll or use a notched squeegee and back-roll with a 3/8" nap roller. If finished surface has debris or recoat window has passed, abrade with UDT supplied 100-grit screens or Maroon Very-Fine Conditioning Pads prior to top-coating or re-coating. For additional chemical and/or abrasion resistance top-coat with Ultra HTS, UltraSpartic 85 or HS, or IMPACT.

SLIP RESISTANCE

UDT recommends the use of traction additives in all coatings or flooring systems that may be exposed to wet, oily or greasy conditions. It is the contractor's and end users' responsibility to select and provide a flooring system that meets current safety standards. UDT makes no claims of longevity of SCOF or DCOF results. UDT and any representatives or sales agents will not be responsible for injury incurred in a slip and fall accident.

MAINTENANCE INSTRUCTIONS

After completing the application of Cold Cure Epoxy, routine sweeping, mopping, washing and mechanical scrubbing is recommended. Plain water is ideal for most environments. Use pH neutral cleaners if/where necessary. The installer should provide the owner with maintenance instructions. Clean and rinse thoroughly if floors become slippery due to animal fats, oil, grease, or soap film.

WARRANTY

Ultra Durable Technologies, Inc. products are warranted to be of uniform quality within manufacturing tolerances. Since no control is exercised over its use, no warranty, expressed or implied, is made to the effects of such use. Seller and manufacturer's obligations under this warranty shall be limited to refunding the purchase price of that portion of the material proven to be defective. Contact your UDT representative for more information.