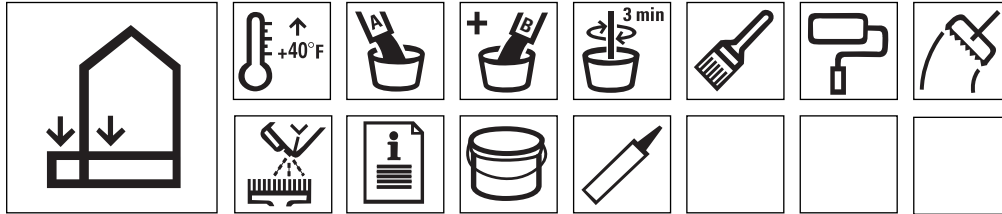


StoPoxy™ Binder

CR633

Division 3

low viscosity
injection resin
moisture insensitive
structurally restores the
integrity of concrete



StoPoxy Binder is a solvent-free, moisture-insensitive, two-component, epoxy binder meeting ASTM C-881 Type I, II, IV, V, Classes B & C, Grade 1 for multiple uses.

Technical Data

REPORT	TEST METHOD	RESULTS	SPECIFICATION
Compressive Modulus	ASTM D-695	267,586	90,000 min. 150,000 min. ^{1,5} 200,000 min. ⁴
Elongation at Break (%)	ASTM D-638	2.3	1.0 min. ^{1,2,4,5}
Tensile Strength (psi)	ASTM D-638	7,168	2,000 min. ² 5,000 min. ¹ 6,000 min. ⁵ 7,000 min. ⁴
Bond Strength 2-Day Cure (psi)	ASTM C-882	2,380	1,000 min. ^{1,4}
Bond Strength 14-Day Cure (psi)	ASTM C-882	3,035	1,500 min. ^{1,2,4,5}
Absorption (%)	ASTM D-570	0.84	1.0 max. ^{1,2,4,5}
Gel Time (minutes)	ASTM C-881	30	30 min. ^{1,2,4,5}
Brookfield Viscosity (cps)	ASTM C-881	500	2000 max.
Shrinkage	ASTM C-883	pass	none
Thermal Compatibility	ASTM C-884	pass	none
Heat Deflection Temperature (°C)	ASTM D-648	50°C	49°C min. ^{4,5}
Filler Content (%)	ASTM C-881	0.0%	none
Compressive Strength (psi)	ASTM D-695	12,385	5,000 min. ² 8,000 min. ^{1,5} 10,000 min. ⁴
Shear Strength (psi)	ASTM D-732	8,500	none
Flexural Strength (psi)	ASTM D-790	8,700	none

* Typical values for material cured at 73°F (23°C) and 50% R.H.
Note: To convert psi to megapascal (MPa) multiply by 0.0069.

¹ASTM C-881 Type I

²ASTM C-881 Type II

¹ASTM C-881 Type IV

¹ASTM C-881 Type V

Packaging

150 ml x 300 ml cartridge
1 gal/3.8 L units

Coverage

1 gal (3.8 L) of mixed epoxy yields
231 cu in (.0037 cu m) of epoxy

1 gal (3.8 L) of mixed epoxy combined
with 5 gal (18.9 L) of aggregate yields
808.5 cu in (.013 cu m) of mortar.

Compliances

ASTM-C-881: Types I, II, IV & V
Grade 1
Class B & C

Shelf Life

24 months in original, unopened,
properly stored container.

Storage

Store away from sparks and open
flames. Store in a dry area, between
40°F (5°C) and 95°F (35°C). Protect
from direct sunlight, and freezing.
Condition material to 65°F (18°C)
and 85°F (29°C) before using.

Features

Benefits

- | | |
|----------------------------------|---|
| 1 Moisture-insensitive | Before and after cure bonds to dry or damp substrates |
| 2 Low viscosity | Easy self-leveling |
| 3 Excellent bond strength | Tenacious bond to concrete, steel and most construction materials |

CR633 StoPoxy™ Binder

Surface Preparation

Remove loose and deteriorated concrete by shotblasting to obtain a fractured aggregate, open profile surface. Make sure surfaces are

sound, clean and free of all bond-inhibiting material including grease, asphalt, rubber, laitance and standing water.

Mixing

Pre-mix each component thoroughly. Place 2 parts by volume of Component A and 1 part by volume of Component B into a clean pail. Mix thoroughly

with low-speed drill (400-600 rpm) until uniformly blended. Mix only the quantity that can be used within its 30 minute pot life.

Application

To Pressure Inject Cracks: Flushing cracks is detrimental and should not usually be done. Use automatic injection equipment for 2:1 ratio epoxy that will absolutely stay on ratio while under pressure. Carefully set surface or counter sink ports on face of crack. Be sure the crack is open where ports are placed and not impacted with debris. Set the ports with StoPoxy Quick-Set Gel, being careful not to obstruct the crack with epoxy. If feasible, also seal the backside of crack with StoPoxy Quick-Set Gel. StoPoxy Quick-Set Gel is a cap sealing compound when used in this application. A successful and profitable injection job depends largely on carefully placing the cap seal and ports allowing the injection to proceed smoothly with no leaks. Allow the cap seal to fully cure. Cure time will depend on temperature and whether StoPoxy Quick-Set Gel was used. Inject StoPoxy Binder, always starting at the lowest port. If the back side of the crack has been sealed, stay on a port as long as it is accepting epoxy. Cap adjoining ports as epoxy extrudes out of them staying on the original port until the pump stalls out or the crack is completely filled.

To Bind Mortar and Grout for Patching:

Premix entire unit of A and B or exact portions, 2 parts A to 1 part B by volume with low speed Jiffy

mixer for 3 minutes. Hold back some neat resin for priming patch. Paint concrete to be patched with just enough neat resin to wet out the surface. Slowly add oven-dried aggregate (typically 4-5 parts of aggregate to 1 part epoxy) to the mixed epoxy while mixing with a slow speed Jiffy mixer being careful not to mix in air. Prepared mortar must be placed before primer becomes tack free. Epoxy mortar may be placed and leveled with trowels. Do not disturb patch until it is fully cured. Ultra-violet light will darken epoxy. Oven-dried aggregate may be sprinkled to refusal on top of mortar to protect from UV. Brush off excess after epoxy has cured.

To Gravity Feed Cracks: Seal underside of slab prior to filling if cracks reflect through. Pour neat StoPoxy Binder into vee-notched crack. Continue placement until completely filled.

Clean up

Equipment: Uncured material can be removed with citrus-based cleaner or other approved solvent. Cured material can only be removed mechanically. Material: Collect with absorbent material. Flush area with water.

Limitations

- Minimum substrate temperature is 40°F (5°C).
- Do not thin. Solvents will prevent proper cure.
- Use oven-dried aggregate only.
- Minimum age of concrete must be 21-28 days, depending on curing and drying conditions, for mortar.
- Do not seal slabs on grade with product. StoPoxy Binder is a vapor barrier.
- Maximum epoxy mortar thickness is 1.5"/3.8 cm per lift.

Health And Safety

Health Precautions

Component A is an irritant. Component B is a corrosive. This product is a strong sensitizer. The use of safety goggles and chemical resistant gloves are recommended if ventilation is inadequate. The use of a NIOSH/MSHA organic vapor respiratory is recommended if ventilation is inadequate. Avoid breathing vapors and skin contact.

First Aid

EYE CONTACT: Flush immediately with water for at least 15 minutes. Contact physician immediately.
RESPIRATORY PROBLEMS: Remove person to fresh air.
SKIN CONTACT: Remove any contaminated clothing. Remove epoxy immediately with a dry cloth or paper towels. Solvents should not be used as they carry the irritant into the skin. Wash skin thoroughly with soap and water. CURED EPOXY RESINS ARE INNOCUOUS.

Warning

KEEP CONTAINERS CLOSED WHEN NOT IN USE. KEEP OUT OF THE REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR INDUSTRIAL USE ONLY. Consult the Material Safety Data Sheet for further health and safety information.

LIMITED WARRANTY

THIS PRODUCT IS SUBJECT TO A WRITTEN LIMITED WARRANTY WHICH CAN BE OBTAINED FREE OF CHARGE FROM: Sto Corp., 3800 Camp Creek Parkway, Building 1400, Suite 120, Atlanta, GA 30331; Tel: 404-346-3666; Fax: 404-346-3119

ATTENTION

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