

SIL-ACT® Product Data

DECK-SIL® EP-2700

100% Solids Epoxy



ADVANCED
CHEMICAL
TECHNOLOGIES, Inc.

"Protecting the World's Infrastructure"

DECK-SIL® Product for Use under U. S. Patent No. 9,242-269.

ABOUT

DECK-SIL® EP-2700 is a two component epoxy healer sealer which when applied to cracked concrete, structurally seals the cracks against moisture and chloride ion intrusion, prolonging the life of the concrete. Its rapid cure time allows traffic to re-open in less than six hours.

BENEFITS

- Excellent Bond Strength
- Moisture Insensitive
- High early strength
- Easy to mix - 2:1 ratio
- 100% solids, super low viscosity
- High tensile strength for superior retention of aggregates
- For use as pre-treatment prior to overlay

USES

- Bridge decks
- Parking decks
- Concrete floors
- Columns & Beams in splash zones
- Consolidation of porous & dusting surfaces
- Primer or pre-treatment for epoxy and epoxy urethane overlays

Before starting, please refer to this product data sheet and the Material Safety Data Sheet for DECK-SIL® EP-2700. Copies may be obtained from ACT upon request.

Application

1. Clean surface by shotblasting or sandblasting to remove all contaminants and open surface and cracks. Remove dust and debris by blowing off with oil-free compressed air.
2. Mechanically mix component A with component B 2:1 by volume with Jiffy type mixer and low-speed variable drill at 300 rpm for a minimum of 3 minutes. Mix only the quantity that can be used within its gel time.
3. Apply DECK-SIL® EP-2700 by pouring or spraying on the surface. Distribute material evenly with a squeegee, roller or broom, maintaining a liquid head over cracks until refusal. Remove all excess material with squeegee or broom.
4. Broadcast select aggregate to properly cover liquid resin. The aggregate should be moisture free and free of dirt, clay, etc.
5. After initial cure of first course, remove extra aggregate.
6. When used as primer or pre-treatment prior to overlay, consult an Advanced Chemical Technologies, Inc. representative.

Minimum Curing Times

	Average Temperature of Sealer Component & Substrate					
Cure Temp	60-64°F	65-69°F	70-74°F	75-79°F	80-84°F	85+°F
Cure Time	5.5 hrs	4.5 hrs	3.5 hrs	3 hrs	2.5 hrs	2 hrs

Coverage

Minimum Epoxy & Aggregate Coverage Rates

	Epoxy Rate	Aggregate Rate
Tined:	1 gal/60-80 sq. ft.	4-8 lbs/sq. yd. (5.4 kg/m ²)
Smooth:	1 gal/100-150 sq.ft.	4-8 lbs/sq.yd. (7.6 kg/m ²)

TECHNICAL DATA

PROPERTY	TEST	DECK-SIL® EP-2700
Mixing Ratio		2:1 by volume
Viscosity	TEX 614-J	110 cPs
Gel Time - 100g Mass (min.)	TEX 614-J	28 minutes
Compressive Strength	TEX 614-J (2 day cure)	6,020 psi
Dry Time (to touch)	ASTM D 679	5hr, 40 min
Wet Strength	TEX 614-J	365 psi
Percent Solids		100%

Limitations

- Do not thin with solvents.
- Deck-Sil® EP-2700 is a vapor barrier after curing.
- Minimum age of concrete must be 28 days before applying as an overlay.
- Minimum application temperature 50°F.
- Shelf - life: 2 years in original unopened container.
- Maximum of one flood coat application.
- Compressed air equipment must have oil/air separator.
- Use in well-ventilated area.

Caution

- Part A: Irritant
- Part B: Corrosive
- Product is a strong sensitizer. Use of safety goggles and chemical resistant gloves are recommended.
- Use of a NIOSH/MSHA organic vapor respirator is recommended if ventilation is inadequate.
- Avoid breathing vapors.
- Avoid skin contact.

Cleanup

EQUIPMENT: Uncured material can be removed with an approved solvent. Cured material can only be removed mechanically.

MATERIAL: Collect with absorbent material. Flush area with water. Dispose of in accordance with local, state and federal disposal regulations.

Packaging

3 gallon kit (2 gallon Part A & 1 gallon Part B)
15 gallon kit (2-5 gallons Part A & 1-5 gallons Part B)
156 gallon kit (2-52 gallons Part A & 1-52 gallons Part B)
750 gallon kit (2-250 gallon Part A & 1-250 gallon Part B)

FIRST AID:

EYE CONTACT: Flush immediately with water for at least 15 minutes. Contact physician immediately.

RESPIRATORY CONTACT: Remove person to fresh air.

SKIN CONTACT: Remove any contaminated clothing. Remove epoxy immediately with a dry cloth or paper towel. Solvents should not be used as they carry the irritant to the skin. Wash skin thoroughly with soap and water.

IF INGESTED: Do not induce vomiting. If swallowed give water to drink. Seek medical treatment immediately.

GENERAL: Remove contaminated soaked clothing immediately. In the event of persistent symptoms, receive medical treatment. CURED EPOXY RESINS ARE INNOCUOUS.

WARRANTY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure: That ACT's products are safe, effective, and fully satisfactory for the intended end use. ACT's sole warranty is that the product will meet the ACT's sales specifications in effect at the time of shipment. Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted. ACT's specifically disclaims any other express or implied warranty of fitness for a particular purpose or merchantability, unless ACT provides you with a specific, duly signed endorsement of fitness for use. ACT disclaims liability for any incidental or consequential damages. Suggestions of use shall not be taken as inducements to infringe any patent.

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Technical Binder

