

## PRODUCT BULLETIN

# Sto Bonding and Anti-Corrosion Agent

Product Number: 80246



## PRODUCT DESCRIPTION

Sto Bonding and Anti-Corrosion Agent is a unique combination of Portland cement, microsilica, epoxy, and acrylic resin. Use it for bonding new concrete or mortar to old concrete and for protecting reinforcing steel against corrosion.

FEATURES	BENEFITS
24-Hour Open Time	Work schedule flexibility, great for formed and shotcrete repairs
Sprayable	Easy to apply, faster application time
Two Components / Field Batched	Easy to follow mixing instructions, no waste
Microsilica-enhanced	Increased strength and density to protect steel against corrosion
Epoxy, acrylic-based	Excellent bond to concrete and steel
Breathable	Not a vapor barrier, can be applied to on-grade concrete
Water Clean Up	No hazardous solvents needed, environmentally friendly
Low VOC	Safe for workers and environment
Non-flammable	Safe for workers

## COVERAGE

70-80 ft<sup>2</sup> per gallon, applied at 20 wet mils (6-7 m<sup>2</sup> per 3.8 L, applied at 20 wet mils).

**Packaging:** Component A: One-gallon jug (3.8 L)  
Component B: 28 lbs. bag (13 kg)

**Shelf Life:** 12 months in original, unopened properly stored container

**Storage:** Store in a dry area, between 50°F (10°C) and 85°F (29°C). Protect from direct sunlight, extreme heat [90°F (32°C)] and freezing.

## SURFACE PREPARATION

### Bonding Agent

Remove loose and deteriorated materials by shot- or sand-blasting, or mechanical means to obtain a fractured aggregate surface. Make sure surfaces are sound, clean, and free of all bond-inhibiting materials including oil, dust, dirt, laitance and standing water.

### Anti-Corrosion Agent

Remove rust or active corrosion using sandblasting or mechanical wire brushing to produce a white metal finish. Make sure surfaces are clean, dry and free of all bond-inhibiting materials including oil, dust and dirt. Sto Bonding and Anti-Corrosion Agent must be applied immediately after cleaning of reinforcing steel to avoid new corrosion on reinforced steel.

## MIXING

Use both components at a preconditioned temperature of 70 ± 5°F (21 ± 3°C). Use one-gallon (3.8 L) jug of Component A per 28-pound (13 kg) bag of Component B.

Mixing must be achieved mechanically using a slow-speed drill and mixing paddle. Shake jug containing Component A. Pour all of liquid Component A into a clean, dry 5-gallon (19 L) mixing bucket. Mix while slowly adding the Component B powder, one third at a time. Continue mixing until all of the powder has been added. Mix thoroughly until Components A and B are evenly blended to a uniform color. Never add water to the mixture. Mix only sufficient material that can be used within its 90 minute pot life

### Clean Up

Clean tools and equipment with water immediately after use. Dried material can only be removed mechanically.

## PRODUCT BULLETIN

# Sto Bonding and Anti-Corrosion Agent

Product Number: 80246

### APPLICATION

Apply only to sound and clean, dry, properly prepared, frost-free surfaces.

#### Bonding Agent

Dampen the area to be repaired so that the pores of the concrete are filled with water. Remove any ponding or glistening water on the surface (saturated surface dry/SSD). Apply in one 20 mil (0.5 mm) coat with a hopper gun, pattern pistol-type spray equipment, or with a stiff-bristle brush. Place fresh mortar or concrete while the Sto Bonding and Anti-Corrosion Agent is still wet or within 24 hours.

As a bonding agent only, one 20 mil (0.5 mm) coat is required.

#### Anti-Corrosion Agent

Brush on two 10 mil (0.25 mm) coats allowing 30-45 minutes between coats. Place fresh mortar or concrete after the Sto Bonding and Anti-Corrosion Agent has dried to the touch or within 24 hours. The total thickness must be a minimum of 20 mils (0.5 mm).

#### Curing

Protect from direct sun or wind which may cause unwanted rapid surface drying.

#### Clean Up

Clean tools and equipment with water immediately after use. Cured material can only be removed mechanically.

### LIMITATIONS

- Apply only when surface and ambient temperatures are 45°F (7°C) and rising or 85°F (29°C) and falling.
- Mix Component A and Component B only in the specified ratios. Never add water to the mixture.
- NOTE: Sto Bonding and Anti-Corrosion Agent dries in approximately 2 hours. Repair material must have sufficient flowability to "wet-out" the substrate in order to assure proper bonding of repair material.

### HEALTH & SAFETY

**WARNING:** Causes eye and skin irritation.

**Precautionary Statement:** Wash hands thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

**FIRST AID MEASURES:** Eye Contact: Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.

**Skin Contact:** Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention. Ingestion: If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Store locked up.

**Spills:** Collect in an appropriate container. Uncured material may be removed with water.

**Disposal:** Dispose of in accordance with local, state or federal regulations.

**Warning:** KEEP CONTAINER CLOSED WHEN NOT IN USE. KEEP OUT OF THE REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR INDUSTRIAL USE ONLY. Consult the Safety Data Sheet (SDS) on [www.stocorp.com](http://www.stocorp.com) 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.

## PRODUCT BULLETIN

# Sto Bonding and Anti-Corrosion Agent

Product Number: 80246

## TECHNICAL DATA

REPORT	TEST METHOD	TEST CRITERIA	TEST RESULT*
Pot Life (minutes)	-----	-----	90
Open Time (hours)	-----	-----	24
Bond Strength (psi)	ASTM C882 Plastic to hardened concrete	2 hours open 8 hours open 16 hours open 24 hours open	1,800 2,100 2,100 2,100
Tensile Strength (psi)	ASTM C190	28 days	800
Flexural Strength (psi)	ASTM C78	28 days	2000
Rapid Chloride Permeability (Coulombs)	AASHTO T-277 ASTM C1202	28 days	<150
VOC (g/L)	This product complies with US EPA (40 CFR 59) and South Coast AQMD (Rule 1113) VOC emission standards for architectural coatings. VOC less than 50 g/L.		
Typical values for material cured at 73 °F (23 °C) and 50 % RH Note: To convert psi to Mega Pascal (MPa) multiply by 0.0069.			

**Sto Corp.**

3800 Camp Creek Parkway  
Building 1400, Suite 120  
Atlanta, GA 30331  
Tel: 404-346-3666  
Toll Free: 1-800-221-2397  
Fax: 404 346-3119  
[www.stocorp.com](http://www.stocorp.com)

Revision Number: A3.0  
Date: 10/2020

**ATTENTION**

This product is intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. It should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, or for other construction activities beyond Sto's control. Improper use of this product or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to this product, and to the structure of the building or its components. **STO CORP. DISCLAIMS ALL WARRANTIES EXPRESSED OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME.** For the fullest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclaimers, please refer to the Sto Corp. website, [www.stocorp.com](http://www.stocorp.com)