Sto Bonding and Anti-Corrosion Agent
80246 Sto Bonding and Anti-Corrosion Agent

Technical Data

<table>
<thead>
<tr>
<th>Report</th>
<th>Test Method</th>
<th>Test Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pot Life (minutes)</td>
<td>ASTM C-882</td>
<td>90</td>
</tr>
<tr>
<td>Open Time (hours)</td>
<td>ASTM C-190</td>
<td>24</td>
</tr>
<tr>
<td>Bond Strength (psi)</td>
<td>ASTC C-190</td>
<td>1,800</td>
</tr>
<tr>
<td>Tensile Strength (psi)</td>
<td>ASTM C-78</td>
<td>800</td>
</tr>
<tr>
<td>Flexural Strength (psi)</td>
<td>ASTM C-78</td>
<td>2,000</td>
</tr>
<tr>
<td>Rapid Chloride Permeability (Coulombs)</td>
<td>AASHTO T-277 ASTM C-1202</td>
<td>&lt;150</td>
</tr>
<tr>
<td>VOC (g/L)</td>
<td>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.</td>
<td></td>
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</tbody>
</table>

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 and for protecting reinforcing steel against rust and corrosion. When used as a bonding agent, it provides up to a 24-hour open time.

Coverage
Bonding Agent: 70-80 ft² per gal, applied at 20 wet mils (6-7 m² per 3.8 L at 20 wet mils). Anti-Corrosion Agent: 70-80 ft² per gal, applied at 0.5 mm wet (6-7 m² per 3.8 L, at 0.5 mm wet)

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 ºC) and 85 ºF (29 ºC). Protect from direct sunlight, extreme heat (90 °F (32 ºC)) and freezing.

Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 24-hour Open time</td>
<td>Provides work schedule flexibility; can be used with formed or shotcrete repairs</td>
</tr>
<tr>
<td>2 Epoxy- acrylic-based</td>
<td>Ensures bond to concrete and steel</td>
</tr>
<tr>
<td>3 Microsilica-enhanced</td>
<td>Increases bond strength: screens out chloride ions, protecting steel against corrosion</td>
</tr>
<tr>
<td>4 Non-vapor Barrier</td>
<td>Allows concrete to breathe naturally; can be applied to on-grade concrete</td>
</tr>
<tr>
<td>5 Two Components</td>
<td>Simple to use; mixing instructions easily understood</td>
</tr>
<tr>
<td>6 Sprayable</td>
<td>Easy to apply; speeds application time</td>
</tr>
<tr>
<td>7 20 mils as a Bonding Agent</td>
<td>Increases coverage; saves money</td>
</tr>
<tr>
<td>8 Field Batched</td>
<td>No waste; mix only the amount needed</td>
</tr>
<tr>
<td>9 Water Clean Up</td>
<td>Tools can be reused; no hazardous solvents needed; environmentally friendly</td>
</tr>
<tr>
<td>10 Low VOC</td>
<td>Safe for workers and the environment</td>
</tr>
<tr>
<td>11 Non-flammable</td>
<td>Safe for workers</td>
</tr>
</tbody>
</table>

Note: To convert to mega Pascal (MPa) multiply by 0.0069

Typical values for material cured at 73°F and 50% R.H.
Product Bulletin

Sto Bonding and Anti-Corrosion Agent

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 1 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 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.

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.

Clean and dry building surface. Mechanical wire brushing to produce a white metal finish. Make sure surfaces are sound, clean, dry and free of all bond-inhibiting materials including oil, dust, dirt, laitance and standing water. Sto Bonding and Anti-Corrosion Agent is still wet 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 8°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 mortar/concrete must have sufficient flowability to “wet-out” the substrate in order to assure proper bonding of repair material.

Health And Safety

Health Precautions
Contains Portland cement and silica. Avoid breathing dust. As with any chemical construction product, exercise care when handling.

Safety Precautions
Use adequate ventilation. Use of a NIOSH/MSA approved dust respirator, safety goggles and protective gloves are recommended.

First Aid
SKIN CONTACT: Wash hands thoroughly with soap and water EYE CONTACT: Flush immediately with water for 10-15 minutes and contact a physician.

RESPIRATORY PROBLEMS: Remove affected person to fresh air immediately and contact a physician.

HYGIENE: Wash hands immediately after use. Wash clothing before reuse.

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.

FOR INTERNAL USE ONLY.

Consult the Material Safety Data Sheet (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.

Refer to Sto Specifications for more complete information on proper use and handling of this product.

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Date: 03/2010

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 express 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.