SMARTBOND™

LOW MODULUS, LOW VISCOSITY
TYPE III, GRADE 1 EPOXY BONDING AGENT

BENEFITS:

- Meets ASTM-C-881-90, Type III, Classes B & C
- Meets AASHTO-AGC-ARTBA
- Excellent Bond Strength
- High Early Strength
- One-Course Application
- Easy to Mix 1:1 Ratio
- Moisture Insensitive
- Non-Flammable

SMARTBOND™ Think Smart!
DESCRIPTION
UNITEX SMARTBOND™ is a solvent-free, moisture insensitive, 100% solids, low modulus, two component bonding agent. It meets ASTM-C-881 Type III, Grade 1, Classes B & C. It also meets USDA specifications for use in food processing areas. Excellent for use as binder for concrete skid-resistant overlays on bridges and elevated slabs.

USES
• Bonding skid-resistant overlays to bridges and elevated slabs
• Patching concrete as epoxy mortar

PROPERTIES and TESTING

<table>
<thead>
<tr>
<th>RESIN PROPERTIES</th>
<th>LABORATORY TESTS</th>
<th>RESULTS</th>
<th>ASTM C881 SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mix Ratio</td>
<td>1 : 1 by volume</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>D 695 Compressive Modulus</td>
<td>64,820</td>
<td>130,000 maximum</td>
<td></td>
</tr>
<tr>
<td>D 638 Tensile Strength</td>
<td>2,610 psi</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>D 638 Tensile Elongation</td>
<td>50%</td>
<td>30% minimum</td>
<td></td>
</tr>
<tr>
<td>C 882 Bond Strength (14 day cure)</td>
<td>3,470 psi</td>
<td>1,500 psi minimum</td>
<td></td>
</tr>
<tr>
<td>D 570 Water Absorption</td>
<td>0.19%</td>
<td>1.0% maximum</td>
<td></td>
</tr>
<tr>
<td>D 2471 Gel Time</td>
<td>15 Minutes</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>D 2393 Brookfield Visc. RV3 @ 20 rpms</td>
<td>1425 cps</td>
<td>2000 cps maximum</td>
<td></td>
</tr>
<tr>
<td>D 2240 Shore D Hardness</td>
<td>69</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>C 883 Effective Shrinkage</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>C 884 Thermal Compatibility</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>AASHTO T-277 Chloride Ion Permeability</td>
<td>0.9 coulombs</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

PACKAGING
1 gal / 3.8 L units (2 – .5gal cans)
2 gal / 7.6 L units (2 – 1gal cans)
10 gal / 37.9 L units (2 – 5gal pails)
110 gal / 416.4 L units (2 – 55gal drums)

COVERAGE
Minimum Epoxy/Aggregate Coverage Rates
Epoxy Rate  | Aggregate Rate
1 gal./40 sq. ft. (1 L/m²) | 10 lbs./sq. yd. (5.4 kg/m²)
Application

Bonding Skid-Resistant Overlays:
1 Repair delamination, potholes and cracks with PRO-POXY 2500.
2 Clean surface by shotblasting to remove all contaminants. Remove dust and debris by blowing off with oil-free compressed air.
3 Mechanically mix component A with component B 1:1 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.
4 Apply neat SMARTBOND™ by notched squeegee at the specified rate.
5 Broadcast select aggregate to refusal.
6 After initial cure, remove excess aggregate. Do not open to traffic.
7 Allow to cure following the table below. Open to traffic.

Minimum Curing Times of SMARTBOND™

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Cure Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>60-64°F</td>
<td>6-5 hrs</td>
</tr>
<tr>
<td>65-69°F</td>
<td>5 hrs</td>
</tr>
<tr>
<td>70-74°F</td>
<td>4 hrs</td>
</tr>
<tr>
<td>75-79°F</td>
<td>3 hrs</td>
</tr>
<tr>
<td>80-84°F</td>
<td>3 hrs</td>
</tr>
<tr>
<td>85+°F</td>
<td>3 hrs</td>
</tr>
</tbody>
</table>

Average Temperatures of Overlay Component & Substrate

- 16-18°C
- 19-21°C
- 22-23°C
- 24-26°C
- 27-29°C
- 29+°C
LIMITATIONS
• Concrete must be saturated surface dry (SSD) before applying SMARTBOND™.
• Material is a vapor barrier after curing.
• Do not thin with solvents.
• Minimum age of concrete must be 28 days prior to applying SMARTBOND™ as an overlay.

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

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 into the skin. Wash skin thoroughly with soap and water.
CURED EPOXY RESINS ARE INNOCUOUS.

CLEANUP
EQUIPMENT: Uncured material can be removed with Unitex CITRI-CLEAN or other 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.

Disclaimer of Warranties: Neither manufacturer nor seller have any knowledge or control concerning the purchaser's use of the product. No expressed warranty is made by manufacturer or seller with respect to the results of any use of the product or container that the product comes in. No implied warranties including, but not limited to, an implied warranty of merchantability or an implied warranty of fitness for a particular purpose are made with respect to the product. Neither manufacturer nor seller assume any liability for personal injury, loss or damage resulting from the use of the product. In the event that the product shall prove defective, buyer's exclusive remedy shall be as follows: Seller or manufacturer shall, upon request of buyer, replace any quantity of the product which is proven to be defective or shall, at its option, refund the purchase price of the product upon return of the product. Manufacturer shall not be responsible for use of this product in a manner to infringe on any patent held by others.