



# ULTRA SBR LATEX

## Polymer Bonding Agent

**ULTRA SBR LATEX** is a carboxylated styrene butadiene copolymer latex admixture that is designed as an integral adhesive for cement bond coats, mortars and concrete to improve bond strength and chemical resistance.

### PRIMARY APPLICATIONS

- Toppings, patches and leveling courses
- Thin sets, terrazzo, stucco and bonding coats
- General reconstruction work and latex modified overlays
- Bridge decks, highways and parking decks

### FEATURES / BENEFITS

- Improves bond strengths to Hardened concrete
- Increases durability under freeze/thaw cycling
- Resistant to deicing salts
- Reduces cracking through increased mortar flexural strength
- Increases mortar wear resistance under rubber wheeled traffic
- Increases mortar tensile strength

### SPECIFICATIONS / COMPLIANCES

- ULTRA SBR LATEX meets ASTM C 1059- 86, Standard Specification for Latex Agents for Bonding Fresh to Hardened Concrete, Type II.
- ULTRA SBR LATEX is classified by The American Concrete Institute as a non-re-emulsifiable bonding admixture.

**Appearance**-ULTRA SBR LATEX is a free flowing white liquid. When used as an admixture for mortars and

concrete, the color of the concrete may initially appear somewhat darker than plain concrete. This is due to moisture retention and the color will lighten up over time as the concrete dries out.

### DIRECTIONS FOR USE

**Surface Preparation**-If using this product as a bond coat, the concrete must be a minimum of 3 days old.

The concrete must be clean and rough. All oil, dirt, debris, paint and unsound concrete must be removed. The surface must be prepared mechanically using a scabber, bush-hammer, shot-blaster or scarifier which will

give a surface profile of a minimum 1/8" (3 mm) and expose the large aggregate of the concrete.

**Note: Acid etching is not acceptable.**

The final step in cleaning should be the complete removal of all residue with a vacuum cleaner or pressure washing. Allow the concrete surface to dry. Do not place bond coat on standing water. All concrete must possess an open surface texture with all curing compounds and sealers removed. All areas should be pre-dampened to reduce moisture loss. Do not place product on standing water.

### TECHNICAL INFORMATION

#### Typical Engineering Data

#### Physical Properties of ULTRA SBR LATEX

Solids Content: 40-45%

Weight per gal.: 8.4 lb (1kg/liter)

pH as shipped: 6-10

**Shelf Life:** 1 year

**Color:** white

#### Typical mix design and test results

Suggested Mortar Mix Design:

Type I Portland: 50 kg

Sand: 150kg

ULTRA SBR LATEX: 10 liter

Water:6-8.4 liter

	with	without
<b>Compressive Strength</b> ASTM C-109 2" (50 mm) cubes 28 days	5,075psi(35N/mm <sup>2</sup> )	4,060 (28N/mm <sup>2</sup> )
<b>Tensile Strength</b> ASTM C-190 28 days	480 psi (3.3 N/mm <sup>2</sup> )	392(2.7N/mm <sup>2</sup> )
<b>Flexural Strength</b> ASTM C-256 28 days	1,305 psi (9. N/mm <sup>2</sup> )	1,046(7.9N/mm <sup>2</sup> )
<b>Shear Bond Strength</b> 28 days	2,900psi (20N/mm <sup>2</sup> )	377(2.6N/mm <sup>2</sup> )

**Chemical Resistance : Limited chemical resistance**



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**Bonding** - For bonding toppings with this product, The Ultra Chemicals strongly recommends using a cement bond coat rather than using this product as a primer by itself. After the surface has been prepared, prime all areas with a bond coat before the topping is applied. Follow mixing and placing instructions listed below. Place the topping on the bond coat before the bond coat dries out.

**Mixing** Prepare the 50kg aggregate with cement/sand ratio of 1-3. Add 6-8 liters of clean water with 10 liter of SBR Latex and mix with aggregate. Small quantities may be mixed with a drill and "jiffy" mixer. Use a paddle type mortar mixer for large jobs. All materials should be in the proper temperature range of 40°F (5°C) 115oF (45°C). Add the appropriate amount of ULTRA SBR LATEX for the batch size and then add the dry material. If using ULTRA SBR LATEX with a pre-packaged product, reduce the amount of water added to compensate for the latex addition. Mix a minimum of 3 minutes. The mixed product should be quickly transported to the repair area and placed immediately.

**Placement**- Discharge material onto the floor.

**BOND COAT APPLICATION-** Ultra SBR Latex is the best solution for old to new concrete joints, construction joints etc. for this purpose recommended ratio should be. 1: 1: 3. SBR : Water : Cement.

After mixing the solution /neeru should be applied / pasted / poured on the required surface. Concrete should be placed before drying the SBR solution  
**Curing**- Proper curing

procedures are important to ensure the durability and quality of the repair. We recommend to use Ultra Cure 603.

### PRECAUTIONS / LIMITATIONS

- Do not use material at temperatures below 45°F (7°C).
- No heavy traffic until the product has cured.
- Protect from freezing.
- Not designed for use on its own as a bonding agent, SBR LATEX must be used in a slurry with Portland cement.
- Use of this product in conjunction with air entrained cement/concrete or with other admixtures may significantly increase total entrained air content. Testing is strongly advised.

### CLEAN-UP

Clean tools and equipment with water before the material hardens.

### Material Requirements

#### Bond Concrete

Mix Type	Coat	Mortar	Topping
Cement			50 kg
Sand	—		150 kg

Water	6-8 Ltr
Total Liquid	16-18 Letter

### PACKAGING

ULTRA SBR LATEX is packaged in bulk, 210 Liters, 30 Liter

### Storage:

Avoid to place direct to sun light and always store in shady areas.

### ISO Certification:

Our production facility at Pakistan is ISO 9001:2008 ISO 14001:2004 by BUREAU VERITAS and UKAS Management

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