

CEMPOL SBR

BONDING ADMIXTURE



DESCRIPTION

CEMPOL SBR is a carboxylated styrene butadiene co-polymer latex admixture that is designed as an integral adhesive for slurry bond coats, mortars and concrete to improve bond strength and chemical resistance.

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.

BASIC USES

- Toppings, patches and leveling course.
- Thin Sets, terrazzo, stucco and bonding slurries.
- General reconstruction work and latex modified overlays.
- Bridge decks, highways and parking decks.

SPECIFICATIONS / COMPLIANCES

- **CEMPOL SBR** meets ASTM C1059-86, Standard Specification for Latex Agents for Bonding Fresh to Hardened Concrete, Type II.
- **CEMPOL SBR** is classified by The American Concrete Institute as a non-reemulsifiable bonding admixture.

TECHNICAL INFORMATION

Typical Engineering Data

Physical Properties of **CEMPOL SBR**

pH as shipped	:	10-11
Color	:	White

Typical mix design and test results

Suggested Mortar Mix Design:

Type I Portland	:	42.6 kg
Sand	:	136 kg
CEMPOL SBR	:	7.66 liter
Water	:	11.4 liter

Compressive Strength

ASTM C-109 50 mm cubes

3 days	3,200 psi (22 MPa)
7 days	4,000 psi (28 MPa)
28 days	4,700 psi (32 MPa)

Tensile Strength ASTM C-190

3 days	330 psi (2.2 MPa)
7 days	480 psi (3.3 MPa)

Flexural Strength ASTM C256

3 days	1,425 psi (9.8 MPa)
7 days	2,075 psi (14.3 MPa)

Material Requirements

Cement Concrete

Mix Type	Slurry	Mortar	Topping
Cement	50.0 kg	50.0 kg	295.0 kg
Sand	–	130.1kg	635.0 kg
#8 Coarse Aggregate	–	–	635.0 kg
CEMPOL SBR	13.5 L	9 L	53 L
WATER	15.0 L	13 L	76 L
Total			
Liquid	28.5 L	22 L	129 L
Yield	30.34 L	84 L	0.7M ³

DIRECTIONS FOR USE

Surface Preparation - If using this product as a slurry 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, bushhammer, shotblast or scarifier which will give a surface profile of a minimum 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 slurry coat on standing water.

All concrete must possess an open surface texture with all curing compounds and sealers removed. All areas should be pre-wetted to reduce moisture loss. Do not place product on standing water.

COVERAGE	(see yield in "material requirements") Cement Slurry : 55.7 - 74.3 m ² , Mortar : 8.0-10.0 m ² -10.0 mm, Concrete Topping : 14 - 15 m ² @ 50 mm *Projected coverage is an estimate only and is highly dependent upon sub-base texture and unit weight of aggregate use
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PACKAGING	CEMPOL SBR is packaged in 210 Liter drums and 20 Ltr pails
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COLOR	Contact CMCI Technical Dept.
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Bonding - For bonding toppings with this product, CMCI strongly recommends using a slurry coat rather than using this product as a primer by itself. After the surface has been prepared, prime all areas with a slurry coat before the topping is applied. Follow mixing and placing instructions listed below. Place the topping on the slurry coat before the slurry coat dries out.

Mixing - Small quantities may be mixed with a drill and "jiffy" mixer. Use a paddle type mortar mixer for large jobs. Add the appropriate amount of latex for the batch size and then add the dry material. If using **CEMPOL SBR** with a pre-packaged product, reduce the amount of water added to compensate for the latex addition. Mix for 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.

SLURRY APPLICATION - Spread the slurry with a stiff bristle broom until the suggested coverage rate has been achieved.

TOPPING APPLICATION - For patching, spread with a trowel, come-along, or square tipped shovel to a thickness that matches the surrounding concrete. Finish by hand trowelling.

On large floor areas, use screed strips as guides in combination with vibratory screeding to level.

Finishing - Finish the repair material to the desired texture. Typical texture is a broom or sponge float finish. Do not add additional water to the surface during the finishing operation.

Curing - Proper curing procedures are important to ensure the durability and quality of the repair or overlayment. To prevent surface cracking, a moist cure should be maintained for 24 hours followed by use of a curing compound such as **KUREKOTE 75 VOX**. Do not use a solvent based curing compound on latex modified mortars.

CLEAN-UP

Clean tools and equipment with water before the material hardens.

PRECAUTIONS / LIMITATIONS

- No heavy traffic until the repair has cured.
- Not designed for use on its own as a bonding agent, **CEMPOL SBR** must be used as 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.

Quality Statement

CMCI manufactures its products at their manufacturing facility in Saudi Arabia as per the Quality Procedures certified to conform with quality Management System described in ISO 9000 series

CMCI provides a comprehensive technical support system for its full range of high performance construction products CMCI also offers full technical field support to consultants, Architects, contractors, applicators and End Users.

The Technical Specification information and recommendations given are based on the current technical knowledge and the user or his representative is recommended to check the suitability of the product CMCI reserves the right to amend the technical characteristic of the product as part of ongoing research and development. As the work execution is beyond the direct and continuous control of CMCI no guaranty and or responsibility is assumed on the performance of work completion executed with use of our products.

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