

## MONOBIND SBR

### Liquid polymer bonding agent for cement containing mixes

#### Description

**MONOBIND SBR** is a one component styrene butadiene rubber latex bonding agent. **MONOBIND SBR** is designed to improve the physical properties of cement mixes and slurries.

#### Applications

**MONOBIND SBR** is ideally designed for use in the following applications:

- » Bonding of new to old concrete when used as a slurry coat.
- » To produce polymer modified screeds and floor toppings.
- » To produce a mechanical key prior to rendering of various plaster mixes on concrete, brick and block surfaces.
- » To produce a repair mortar for patching of honey-combed concrete, internally and externally.
- » To produce waterproof renders.

#### Advantages

- » **Successfully increases the bonding/adhesion of cement mixes.**
- » Excellent waterproof additive which helps produce waterproof renders, screeds and toppings.
- » Effective plasticiser giving improved workability and cohesion.
- » Improved mechanical and physical properties by increasing tensile, flexural and adhesive strengths.
- » Reduces shrinkage and cracking in repair and screeding mixes.
- » Good freeze/thaw resistance. » Chloride free.
- » Non-toxic, can be used for concrete in contact with potable water.

#### STANDARDS

**MONOBIND SBR** complies with:

- » ASTM C1059-99, Type 1 and 2, when tested in accordance with test method ASTM C1042.
- » ASTM C932, for bond strength.

#### TECHNICAL PROPERTIES @ 25°C

**Active solid content:** 48 - 50 %

**Specific gravity:** Around 1.0

**Colour:** White

**pH:** 7 - 10

**Slant shear strength:**

\* **ASTM C1042-99**

**Type I (dry)** > 7.0 MPa

**Type II (after immersion)** > 10.5 MPa

**Tensile bond strength:** > 1800 KPa (wet condition)

\* **ASTM C932**

**Shrinkage during cure:** 0.01 - 0.02%

**Resistance to water:** Excellent

*Results are for slurry mix with (1:1:4) mixing ratio,*

**MONOBIND SBR** : Clean water : OPC Cement by volume.

#### Method of Use

##### SUBSTRATE PREPARATION

The substrate should be sound, clean and free from contamination. Surface laitance should be removed by acid etching. Exposed steel reinforcements should be grit blasted or wired brushed to a bright finish to insure it is clean of all surface contaminants.

For patch repair, cut back the edges of the repair areas to a minimum of 10 mm depth to avoid thin repair thicknesses. Presoak substrates with water prior to commencing the repair.

##### Mixing

In general, **MONOBIND SBR** should be added and mixed with the clean water prior to dry materials for better dispersion.

##### 1) As a bonding agent slurry:

The recommended mix to produce slurry consistency can be achieved by mixing 1 Cempatch SBR : 1 Clean water : 4 OPC cement by volume.

**2) As a bonding and waterproofing additive for site mixed floor screeds, renders, concrete repair and floor patching:** The following table shows the mix designs proposed for the reinstatements of old floors, general purpose patch repair mortar and new floor screeding.

	Thin Section 6 - 15 mm	Thick section 12 - 40 mm
<b>Cement</b>	50 kg	50 kg
<b>Clean sand</b>	125 kg	75 kg
<b>3 - 6 mm aggregate (preferably granite chips)</b>	-	100 kg
<b>MONOBIND SBR</b>	4 - 7 ltr	4 - 7 ltr
<b>Water</b>	17 - 19 ltr	17 - 19 ltr
<b>Yield approximately</b>	0.11 m <sup>3</sup>	0.12 m <sup>3</sup>

## APPLICATION

### 1) As a bonding agent slurry:

Use a stiff brush to apply a thick coat to presoaked surfaces. Application of the subsequent render, mortar or screed should take place while the bond coat is still wet (tacky). DO NOT apply on dry bond coats. (If bond coat dries before subsequent application, roughen the dry coat before applying a further coat of **MONOBIND SBR**.)

**2) As a bonding and waterproofing additive for site mixed floor screeds, renders, concrete repair and floor patching:** Apply the screed, repair mortar or render mix using wooden float to place and compact while the bond coat is still wet (tacky). Finish with a steel float.

## CURING

Care should be taken for appropriate curing. Use a chemical curing compound or a wet hessian completely covered with a polyethylene sheet for curing.

## CLEANING

All tools should be cleaned immediately after use

with fresh clean water. Hardened materials should be cleaned mechanically.

## PACKAGING

**MONOBIND SBR** is available in 1, 5, 10, 20 and 50 kg containers.

## STORAGE

**MONOBIND SBR** has a shelf life of 12 months from date of manufacture if stored at temperatures between 5°C and 35°C in closed packaging.

If these conditions are exceeded, **DCP Technical** Department should be contacted for advice.

## CAUTIONS

### HEALTH AND SAFETY

**MONOBIND SBR** is nontoxic. Avoid skin and eye contact. Gloves and eye protection should be worn. The use of barrier cream is recommended on exposed areas of the skin.

In case of accidental contact with eyes, immediately flush with plenty of water for at least 10 minutes and seek medical advice.

For further information refer to the Material Safety Data Sheet.

## FIRE

**MONOBIND SBR** is nonflammable.

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