Distribution

# Sika® SBR 100

## SBR based multipurpose polymer for waterproofing and repair

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| **Product Description** | Sika® SBR 100 is a synthetic rubber emulsion which when added to cement slurry/ cement mortar/concrete/grout provides good adhesion and water resistance. It comes in the form of a milky liquid. It is fully soluble in water and is to be added directly to the gauging water of mortar/concrete/ cementitious grout. |
| **Uses** | ■ For waterproofing of roof slabs, sunken slabs, basements, water tanks, sunshades etc. in combination with cement<br>■ As a bonding agent for uses in repair and plastering<br>■ For making polymer mortar for repairs , etc.<br>■ Treatment for leaching and saltpetre action<br>■ Multipurpose mortar admixture for injection grouts |
| **Characteristics / Advantages** | ■ Improves elasticity, flexibility, tensile strength of cement and reduces cracking<br>■ Makes the mortar waterproof and reduces susceptibility to acids and gases, salt petre action etc.<br>■ Mortar with Sika® SBR 100 shows extremely good bonding to bases like concrete, stone, brick etc.<br>■ Reduces viscosity of cement injection grout and improves bond of cured injected materials with substrates<br>■ Sika® SBR 100 can be diluted with water (1 : 4 - 6) depending on the type of application<br>■ Screed required with Sikacim®/ Sika® Plastocrete Super to protect waterproofing layer |

## Product Data

### Form

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| **Appearance / Colour** | White (milky) liquid |
| **Packaging** | 250g, 500g, 1kg, 5kg, 10kg, 20kg |

### Storage

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| **Storage Conditions / Shelf Life** | 18 months from date of production if stored in undamaged and unopened, original sealed packaging, in dry conditions and protected from direct sunlight. Protect from frost. |

### Technical Data

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| **Chemical Base** | Styrene butadiene rubber emulsion. |
| **Density** | ~ 1.02 kg/l at 27ºC |
| **Polymer Content** | ~ 30.0 % by weight |

# System Information

## Application Details

**Consumption**

| Application | Sika® SBR 100: Water: Cement ** | Dilution in Water | Application Area | Consumption of Sika® SBR 100at mentioned recommended dilutions |
|---|---|---|---|---|
| Waterproof Slurry Coating/Bond Coat | 1:4:6-7 | 1:4 | Waterproof Coating | 0.075 kg/sqm per coat (1kg diluted Sika® SBR 100 approximately covers 6-8 sqm in two coats depending on substrate) |
| Polymer Mortar (1Cement:4 Sand) | - | 1:4-6 | Polymer Repair Mortar | 0.035 kg/sqm/mm thickness at Water: Powder ratio of 0.5 ( ½ inch mortar requires approx 0.44 kg diluted Sika® SBR 100) |
| Putty (1 part Sika® SBR 100 : 2 part Marble Dust) | - | 1:1 | Crack filling etc. | 0.015 kg/sqm/mm thickness at Water: Powder ratio of 0.5 |
| Polymer Concrete (1cement:2Sand:4Aggregates) | - | 1:4-6 | Repair Concrete & Screed | 10-15% by weight of cement at Water: Powder ratio of 0.5 |
| Additive to cement for injection grouting | - | 1: 6-8 | - | 3-6 kg/bag of cement |

** usage of OPC is recommended

**Substrate Quality**

Clean and dry, homogeneous, free from oils and grease, dust and loose or friable particles. Paint, cement laitance, old coatings and any other contaminants.

**Substrate Preparation**

Cementitious substrates should be pre-saturated surface dry with clean water.

## Application Instructions

**Mixing**

Sika® SBR 100 is to be added to cement/ cement mortar/concrete/grout depending on the type of application as per the table above.

Mixing of diluted Sika® SBR 100 to cement mortar should preferably be done manually by volume as per the table.

**Application Method / Tools**

**Waterproof Coating**

Prepare the base as indicated in the above table. Spread cement primer by using Sika® SBR 100: Water = 1: 4 by volume in order to obtain a thin layer.

When the primer coat is still fresh and sticky, apply mortar made out of Sika® SBR 100: Water = 1: 4 by volume and finish with a trowel / brush.

During application the mixture of Sika® SBR 100and cement needs to be continuously stirred to prevent the cement particles from settling.

Prepared material must be used with in 20- 30 minutes depending upon temperature humidity etc. When used as waterproofing slurry coating minimum two coats is recommended To be protected by screed on top for longer life.

Standard coating system can be further reinforced by placing Sika® Fab 1 fabric layer in between 1st and the 2nd coat.

**Masonry Jointing**

Prepare the base as indicated above. Make a firm mortar with fine sand using Sika® Latex Power: Water = 1: 6-8. Impregnate the area with primer coat as above. While the primer is still wet, apply the mortar and immediately finish or reshape the surface as required

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**Polymer Mortar**

Dilute Sika® SBR 100 with water in the proportion of 1: 6 by volume. Prepare the mortar with this gauging water. Cured plaster with Sika® SBR 100would harden faster and would be watertight. This type of polymer mortar should be used for all repair jobs for optimum performance.

Standard mortar system can be further reinforced by placing Sika® Fab 1 fabric layer in between 1st and the 2nd coat.

**Bonding Successive Concrete Casts**

Wash the surface with high pressure jet. Prepare a pasty mortar with Sika® SBR 100: Water = 1: 6-8 by volume. Apply this mortar onto the surface in a layer of 20-30 mm thickness. Pour fresh concrete after about an hour. When used as a bonding agent between subsequent layers of plaster the same procedure is to be adopted.

**Polymer Modified Cement Grout for Injection**

Open the crack lines into V or U groove and fix galvanised iron nozzles spaced at regular intervals of 0.5 to 1.5 mm c/c along groove length with Sika®- 2 / Sika®-4a mortar or Sikadur®-31. Prepare a cement grout slurry admixed with Sika® SBR 100at a dilution rate of 1: 6-8 by volume with water. Inject the fluid as per normal practice.

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| **Cleaning of Tools** | Clean all tools and application equipment with water immediately after use. Hardened / cured material can only be removed mechanically. |
| **Waiting Time** | As waterproof coating 2-6 hours depending on temperature and humidity |
| **Notes on Application / Limitations** | Avoid application in direct sun and/or strong wind. Apply only to sound, prepared substrates. Do not exceed maximum layer thickness.<br>For waterproofing or damp proofing application, always use at least 2 coats. In areas of severe water penetration, three coats might be required.<br>Protect freshly applied material from rain etc. |

## Curing Details

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| **Curing Treatment** | 3-5 days with wet burlap/ gunny bag/ hessian cloth. Not to be ponded with water. |

## Value Base

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

## Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

## Legal Notes



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