

## TECHNICAL DATA SHEET

### KAYRA SBR LATEX 3001

*(SBR Based Bonding Agent & Waterproofing Additive)*

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#### Product Description

Kayra SBR Latex 3001 is a Styrene Butadiene Rubber-based additive supplied as a ready-to-use milky white liquid.

It is used as a bonding agent and waterproofing additive in concrete and mortar. It improves adhesion between old and new concrete, enhances waterproofing, and increases durability and abrasion resistance.



#### Typical Applications

- **Concrete Repairs:**  
Spalled concrete in floors, columns, beams, chhajjas, slabs, parapets, etc.
- **Waterproofing:**  
Small terraces, sunken portions of toilets & bathrooms, chhajjas, lift pits, balconies.
- **Bond Coat:**  
For bonding new concrete to old concrete, masonry, stonework, plastering.
- **Cladding Applications:**  
Fixing or re-fixing slip bricks, tiles, stones, marble bedding, etc.
- **External Rendering:**  
Weatherproof and frost-resistant rendering.
- **Pinhole Treatment:**  
As a bonding slurry coat on concrete surfaces to close pinholes.

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#### Features & Benefits

- **Multipurpose:**  
Versatile & economical, easy to apply for bonding, repair, or waterproofing.
- **Crack Resistance:**  
Prevents cracking by improving the flexural strength of the mix.
- **Surface Hardness:**  
Increases surface hardness and prevents dust formation.
- **Shrinkage Reduction:**  
Reduces drying and aging shrinkage cracks in cementitious mortars.

- **Excellent Bonding:**  
Strong adhesion to concrete, masonry, plaster, and cement surfaces.
  - **Erosion & Corrosion Resistance:**  
Enhances resistance to environmental effects and protects steel.
  - **Abrasion Resistance:**  
Improves wear resistance in cement mixes.
  - **Grouting Efficiency:**  
Improves fluidity of cement grout by reducing viscosity, ensuring better penetration and bonding.
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### Packaging Available

- **Sizes:** 5 kg, 10 kg, 20 kg, and 50 kg containers
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### Method of Application

#### 1. Surface Preparation

- Clean surface using a wire brush or scrubber to remove dust, laitance, loose particles, and contaminants. Degrease if required using appropriate solvent.
  - Cut edges of the damaged concrete to at least 10 mm depth to avoid feather edging and ensure good bonding.
  - If surface breaking is not possible, roughen the surface with light scabbling or grit blasting.
  - Pre-wet the substrate thoroughly with potable water. Ensure no standing water before applying coating or mortar.
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#### 2. Waterproofing Coating

- Mix **KAYRA SBR LATEX 3001** with **cement in 1:1.5 ratio by volume**.
- Mix thoroughly for 2–3 minutes to avoid air entrapment. Add cement gradually while stirring continuously until brushable consistency is achieved.
- Apply **2 coats** with a brush at an interval of 4–6 hours.
- Protect the coating by overlaying a protective screed with appropriate slope and thickness.
- • Brush apply **2 coats** of the mix at an interval of **4–6 hours** on the properly prepared surface.
- • After the second coat, overlay with a **protective screed** as per the desired **slope and thickness**.

### **3. Bonding Primer**

- Prepare a slurry mix in a **1:1 volume ratio** of **KAYRA SBR LATEX 3001 : Cement**.
  - Apply **1 continuous coat** of the slurry onto the prepared surface using a brush.
  - **Do not allow the slurry to dry**. Overlay with repair mortar while the bond coat is still tacky.
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### **4. Repair Mortars & Renders**

- Recommended mix for **patching mortar or render**:
    - **Cement**: 50 kg
    - **Washed Sand**: 150 kg
    - **KAYRA SBR LATEX 3001**: 6 – 7.5 kg
    - **Water**: 10 Litres
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### **5. Floor Screeds & PCC**

- Recommended mix design:
    - **Cement**: 50 kg
    - **Washed Sand**: 75 kg
    - **6 mm Aggregates**: 75 kg
    - **KAYRA SBR LATEX 3001**: 6 – 7.5 kg
    - **Water**: 10 Litres
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### **6. Mixing & Application Guidelines**

- Use a **PAN Mixer or forced action mixer** for consistent results. A drum mixer with a **spiral paddle attachment** on a heavy-duty drill (400–500 rpm) is also acceptable.
- **Hand mixing is allowed only for quantities below 25 kg.**
- **Mixing Sequence**:
  1. Add dry cement and sand (and aggregates, if required) to the mixer.
  2. Mix for **1–2 minutes**.
  3. Add **pre-dispersed KAYRA SBR LATEX 3001 in water** slowly into the dry mix.
  4. Mix thoroughly for another **2–3 minutes** to avoid air bubbles.
  5. Add water gradually to reach the desired consistency.

## Mix Design Using KAYRA SBR LATEX 3001

No.	Application	Composition	Quantity of KAYRA SBR LATEX 3001	Consistency & Thickness
1	Patching & Repair Mortar	OPC – 50 kg Washed sand – 150 kg Water – 10 Lit	6 – 7.5 kg	Mortar consistency, 5–25 mm thickness
2	PCC / Floor Screed	OPC – 50 kg Graded & washed sand – 75 kg 6 mm downsize aggregates – 75 kg Water – 10 Lit	6 – 7.5 kg	Mortar consistency, 10–40 mm thickness
3	Waterproofing Coating	OPC – 50 kg	20 – 22 kg	Brushable consistency
4	Slurry for Pinhole Treatment & Grouting	OPC – 50 kg Water – 5 Lit	5 kg	Slurry consistency

## Technical Information

PROPERTIES	RESULTS
Nature	Milky white, translucent, free flowing liquid
Type	SBR Latex (Styrene Butadiene Rubber latex)
Total solids % by mass @ 105°C	38 ± 1
pH value	7.7
Sp. gravity at 27.5°C	1.01
Coverage (URP:Cement in 1:1.5 ratio) in 2 coats	2 – 2.2 m <sup>2</sup> for the mix of 1 part of URP and 1.5 part of cement

## Dosage

- **As a waterproofing coating** – Mix proportion by volume 1:1.5 (KAYRA SBR LATEX 3001 : Cement)
- **As a mortar modifier** – 10–15% of KAYRA SBR LATEX 3001 by weight of cement
- **As a bonding agent** – Mix proportion by volume 1:1 (KAYRA SBR LATEX 3001 : Cement)

## Coverage

- **Waterproofing coating** – 2.0 – 2.2 m<sup>2</sup>/kg in 2 coats
- **Mortar modifier** – 6.0 – 7.5 kg of KAYRA SBR LATEX 3001 per 50 kg of cement

- **Bonding agent** – 4.2 – 4.5 m<sup>2</sup>/kg per coat
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### **Precautions & Limitations**

- Follow the recommended dosage to achieve the desired performance
  - In hot weather, extra water may be added to compensate for evaporation loss and maintain workability
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### **Shelf Life**

- Best before **18 months** from the date of manufacture when stored in sealed condition
  - Keep in a cool, dry place away from direct sunlight
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### **Health & Safety Precautions**

- Cementitious mortars/slurries modified with KAYRA SBR LATEX 3001 may release alkali, which can be harmful to skin and eyes
- Use protective clothing, gloves, eye protection, and respiratory gear during application
- In case of contact with **skin**, rinse with clean water and wash with soap
- In case of contact with **eyes**, rinse immediately and seek medical attention

**Disclaimer:** KAYRA construction chemical dry mix products are guaranteed against material and manufacturing defects. The product is sold as per standard terms and conditions of sales, copies of which may be obtained on request. KAYRA's endeavor is to ensure correct and accurate information on product performance and recommended specifications as mentioned in literature, and still may have to abstain from circumstantial deviations which are beyond control due to human intervention, atmospheric conditions or natural calamities which may not be in accordance with any advice, specification, recommendation or information given by it.