SBR

Product Description: SBR is a white styrene butadiene emulsion used to improve the properties of cement renders, screeds and mortars.

Uses: High strength floor screeds
Patching and repairing mortar
Thin section screeds
As a bonding bridge for renders and waterproofing and protection of steel
Waterproof renders and screeds

Properties: Adhesion improved
Flexural strength improved
Tensile strength increased
Water permeability reduced
Shrinkage reduced
Non corrosive to steel
Increased abrasion resistance

TECHNICAL DATA:
Appearance: Form Liquid
Colour White
Solids Content 47% +/- 1%
S.G. Approx. 1.01
Coverage Bonding grout 4 sqM/L depending on surface and application technique
Approx 1 litre of SBR per sq.m at 15mm thickness of render
Mortar: See mixing table

Application: 5 Litres of SBR per 25kg bag of cement in external render for an area of normal exposure
7 litres of SBR per 25kg bag of cement to give totally waterproof render

Temp. Min. .5 degrees C

Service (compared with unmodified mortar)
Flexural Strength +20% -30%
Tensile Strength +20% -30%
Abrasion resistance Up to 200%

Preparation: The substrate should be free of all oil, grease, existing sealers or other contaminants. All loose material should be removed and a key provided using a scabbling machine or enclosed grit blaster. The surface should be well soaked with water prior to application of the bonding grout. Do not allow ponded water to remain on substrate.

Priming: Use SBR as a Bonding Grout/Slurry. Mix 1 part by volume SBR with 1-2 parts Portland cement concrete. DO NOT allow to dry prior to the application of subsequent layers.
Mixing: Typical & suggested uses

**Mix A:** Standard mortar for water resistant repairs, patching floors, screeds, renders and repointing masonry.
Mix Design (aggregates are calculated as dry)
- **Portland Cement:** 50kg
- **Sand:** 125kg
- **Aggregate:** nil
- **SBR:** 7 litres
- **Water:** up to 12 litres
- **Additions:** nil
- **Typical Yield:** 0.09m³
An additional 25kg sand should be added where a topping thickness is in excess of 12mm.

**Mix B:** High performance repair mortar with improved chemical and physical properties. Waterproofing renders. For heavy duty applications.
Mix Design
- **Portland Cement:** 50kg
- **Sand:** 125kg
- **Aggregate:** nil
- **SBR:** 9 litres
- **Water:** up to 9 litres
- **Additions:** nil
- **Typical Yield:** 0.09m³
Where larger areas are to be treated over 12mm in thickness add a further 25kg of sand.

**Mix C:** Heavy duty floor screeds up to 25mm thickness. Heavy duty patch repair mortar for industrial floors
Mix Design
- **Portland Cement:** 50kg
- **Sand:** 75kg
- **Aggregate:** gravel 75kg (3-6mm)
- **SBR:** 6 litres
- **Water:** up to 12 litres
- **Additions:** nil
- **Typical Yield:** 0.10m³

**Mix D:** Adhesive mortar for bonding slip bricks, tiles, coping stones, kerbs etc.
Mix Design
- **Portland Cement:** 50kg
- **Sand:** 125kg
- **Aggregate:** nil
- **SBR:** 9 litres
- **Water:** up to 9 litres
- **Additions:** nil
- **Typical Yield:** 0.09m³
For thin section joints use Zone 4 sand. Keep water content to a minimum.
1. Substance/preparation and company name

   SBR Bonding Liquid

   Restoration UK Ltd
   Unit 3
   18 Hanford Way
   Loughborough
   Leics
   LE11 1LS

2. Composition/information on ingredients

   Chemical nature
   Approx. 50% aqueous dispersion of a copolymer based on styrene butadiene.

3. Possible hazards

   Critical hazards to man and the environment: none.

4. First aid measures

   General advice: Remove contaminated clothing.
   If inhaled: keep patient calm, remove to fresh air, summon medical help.
   On skin contact: Wash thoroughly with soap and water.
   On contact with eyes: Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.
   On ingestion: Immediately rinse mouth and then drink plenty of water, summon physician.

5. Fire fighting measures

   Suitable extinguishing media:
   Water spray, dry extinguishing media, foam, carbon dioxide (CO2)

6. Accidental release measures

   After spillage/leakage/gas leakage:
   Large spillages should be pumped into containers; soak up remainder with absorbent material, (e.g. Kieselgur) Small spillages can be swilled away with water. Waste must be disposed of correctly.

7. Handling and storage

   Handling
Advice on safe handling:
No special measure necessary.

Storage
Store protected against freezing.

8. Exposure controls and personal protection

Additional information on the lay-out of technical plant

(see 7)

Components with workplace control parameters

butadiene, CAS-No. 106-99-0 styrene,
CAS-No. 100-42-5 ethylbenzene, CAS-No.
100-41-4 formaldehyde, CAS-No. 50-00-0

Refer to the current edition of HSE Guidance Note EH 40 on Occupational Exposure Limits (United Kingdom).

This product should be considered when making any assessment under the UK control of substances Hazardous to Health Regulations (COSHH), and amendments (United Kingdom).

Personal protective equipment
Eye protection: goggles
General safety and hygiene measures:

Hands and/or face should be washed before breaks and at the end of shift. Avoid contact with eyes and prolonged skin contact.

9. Physical and chemical properties

Form: Liquid

Colour: white

Odour: slightly aromatic

10. Stability and reactivity

Thermal decomposition:
No decomposition if used correctly.

Hazardous reactions:
No decomposition if used correctly.

11. Toxicological information

In our experience and according to information available to us the product is not harmful to health provided it is correctly handled and processed according to the given recommendations.

12. Ecological information
Elimination information

The product can be virtually eliminated from water by abiotic processes e.g. absorption onto activated sludge.

Do not discharge product into natural waters without pretreatment (biological treatment plant).

Behaviour and environmental fate

inhibition of degradation activity sludge is not to be anticipated during correct introduction of low concentrations.

Ecotoxic effects

Further ecological information
Local effluent treatment regulations should be complied with.

Disposal Considerations
Must be disposed of by special means, e.g. suitable incineration, in accordance with local regulations.

The UK Environmental Protection (Duty of Care) Regulations (EP) and amendments should be noted (United Kingdom)

14. Transport information
Not classified as hazardous under transport regulations.

15. Regulatory information
Labelling according to EEC Directives
Not subject to labelling in accordance with EEC Directives.
Handle in accordance with good industrial hygiene and safety practice.
National legislation/regulations

16. Other information
The information contained herein is based on the present state of our knowledge and does not therefore guarantee certain properties. Recipients of our product must take responsibility for observing existing laws and regulations.