SBR 50

Enhancing latex flexibility of cement-based mortars

- **Provides flexibility to cement based adhesives & mortars**
- **Increases the bonding strength of cement based tile adhesives**
- **Improves the mechanical strength**
- **Reduces the required amount of water**
- **Prevents cracks**
- **Enhances abrasion resistance**

Description	SBR 50 is an APEO-free water-based emulsion of modified styrene–butadiene polymers, specifically designed for use in cement-latex compositions where properties such as good chemical and mechanical stability as well as long term non-foaming behavior is important.
Uses	SBR 50 can be used as an additive: • in cement mixtures with aggregates and water in order to repair mortars or screeds before fixing tiles, renders, industrial floors • mixed with cement or with the hydraulic binder NOVACEM CREATIVE/ FLOOR and water to create a bonding slurry for cementitious screeds and concrete • in tile adhesives and grouts to increase their flexibility • with smoothing compounds such as NOVAFINA or STUCCOFINA for external applications

Technical Data

Product Identity	
Form	Liquid
Color	White
Chemical substance	Styrene-butadien dispersion
Density	1,0 ± 0,1 kg/L
pH	8,5 – 9,5

Application Procedure

Preparation of the substrate

The surfaces on which we will apply cement mortar mixed with SBR 50 must be solid without loose parts, clean, free of dust and oil and without traces of paint. The substrate must then be wetted but no excess water must remain on the surface.

Preparation of the mix

Dilute SBR 50 with water in the correct ratio for every case, pour the solution into the mixer and then add cement and aggregates. It would be better if cement and aggregates are already mixed together so that we can avoid lumps during the mixing procedure with the SBR 50 dilution. Mix for about 3-5 minutes until the mix becomes homogenous and free of lumps. After the application, especially in very hot weather, protect the mortars produced with SBR 50 from fast drying in order to avoid cracks caused from fast water evaporation.

Bonded screeds 15 up to 50 mm thick

SBR 50 can be used as an additive for the preparation of bonded screeds for interior and exterior areas. The recommended mixing ratio is shown in the chart below:

SBR	80 – 100 L
Water	80 – 100 L
Cement	350 – 450 kg
Sand	1 m^3

Note: prior to the application of this cement screed, it is recommended to apply a bonding slurry consisted of SBR 50, water and cement in proportion 1:1:2-3. Do not wait for the slurry to set, apply fresh on fresh.

Unbonded screeds for thickness greater than 50mm

The minimum thickness of floating screeds depends on the traffic loads. For houses with loads ≤ 2 kN/m^2 this is determined at 50 mm while for heavy traffic with loads ≈ 5 kN/m^2 at least at 65 mm. Indicative dosage:

SBR	50 – 60 L
Water	100 – 120 L
Cement	300 – 350 kg
Sand	1 m^3

Preparation of the mix for plasters

SBR 50 can be used as an additive for cement based renders for walls in internal and external areas. The result is better adhesion to the substrate, reduced porosity, better resistance to atmospheric agents and increased tensile strength. The recommended mixing ratio for the scratch coat is shown in the chart below:

SBR	2 parts by weight
Water	1 parts by weight
Cement	3 parts by weight
Sand	3 parts by weight

The recommended mixing ratio of the basic layer of plaster is shown in the chart below:

SBR	1 parts by weight
Water	2 parts by weight
Cement	5 parts by weight
Sand	15 parts by weight

The proportion of water has been calculated with dry aggregates. In case of damp aggregates the quantity of added water in the mix should be reduced.

Mixing with cement based compounds

SBR 50 can be used for enhancing the technical characteristics of cement-based compounds such as plasters (i.e. ST 30), tile adhesives or wall smoothing compound (i.e. NOVAFINA). The recommended proportion is to mix 1 part of SBR 50 with 2 parts of water, depending also on the type of application. For further information contact our Technical Department.

Bonding slurry – bonding bridge

It is recommended to apply a bonding slurry to increase the adhesion of fresh mortars to hardened concrete, cement screeds such as industrial floors or cementitious waterproofing sealants such as SC 200 PENETRATE, SC ELASTIC, SC ELASTIC EASY.

1 part SBR 50
1 part water
2 – 3 part Portland cement or NOVACEM CREATIVE / FLOOR

The application of the new mortar should be done in the still fresh layer of the bonding slurry.

Recommendations

- SBR 50 should not be added directly to dry mortar. Dilute initially with a suitable amount of water and add this solution to the final mortar
- Do not use SBR 50 in temperatures lower than $+5^0$C and higher than $+35^0$C
- For coatings and mortars produced with SBR 50 apply the same placement and maturing rules as for conventional ones
- Do not use SBR 50 to create monolithic adhesion between new and old concrete (use EPO FLUID)
- Always take the appropriate precautions for cement mixes (correct granulometry, curing in humid environment) while working with SBR 50 mortars
- It is recommended that the application be made by a professional user

Consumption	Dissolves in water with a mixing ratio of 1:1 to 1:10 depending on the application. Prior to each application, suitability tests should be performed for optimum composition.
Storage	SBR 50 remains stable for 12 months in unopened packaging, protected from frost and direct sunlight.
Packaging	SBR 50 is available in tanks of 1000kg, drums of 20kg, 5kg and bottles of 1kg inside boxes of 12 pieces
Safety Instructions	For information and instructions regarding disposal and safe handling, users should refer to the latest Safety Data Sheet of the product containing ecological, toxicological and other safety-related data.
Legal notes	The technical data and recommendations contained or listed in this leaflet are the result of laboratory measurements, of our current knowledge and experience. All the above-mentioned information and specifications should in any case be considered as indicative, as they may differ from each other. The Company makes every effort to ensure the accuracy of the information provided herein. Product specifications, prices and availability are subject to change without notice and may differ from those shown. In practice, variations in materials, substrates and on-site implementation conditions are such that no warranty can be given or implied as to the merchantability or suitability of the materials for a particular purpose and for the exact conditions of each project. Anyone interested of using the product must be sure beforehand that the product is suitable for the intended use and in any case, the user is solely responsible for any consequences due to the use of the product. Among other things, the Company is not responsible for any normal wear or tear from environmental or other inappropriate conditions. We reserve the right to revise or change the data herein without prior notice. Restrictions and disclaimers apply to the extent permitted by applicable law. The Company has a Technical Support Department, which is the only one responsible for providing technical advice and solutions to deal with problems. Requests to the Technical Support Department are addressed and answered, only in writing. For the latest and a valid version of the Technical Data Sheet, the user of the material must refer to our website www.novamix.gr or directly to the QR Code of the product.

USGBC MEMBER

CERTIFIED ISO 9001:2015 COMPANY

CERTIFIED ISO 14001:2015 COMPANY

SCAN ME

DOMOCHEMICAL S.A.
40 Papanikoli str.
Chalandri, 15232, Athens
T +30 210 68 93 953
F +30 210 68 94 571
novamix@novamix.gr