

Cebex SBR



Cebex SBR
February 2001

Permeability reducing polymer admixture

Uses

Improvement of cementitious screeds, renders, mortars and concretes to provide increased water resistance and reduce penetration by aggressive materials.

Advantages

- Improves durability by reducing moisture penetration.
- Air entrainment provides increased freeze-thaw resistance.
- Air entrainment improves harsh mortar mixes.
- Improves tensile and flexural properties of cementitious systems.
- Increases adhesion to concrete and steel.
- Suitable for use where styrene butadiene emulsion modified screeds or mortars are specified.

Description

Cebex SBR is a chloride free polymer admixture based on a modified styrene butadiene polymer emulsion. It is supplied as a white emulsion suitable for use as a bonding aid or in gauging cementitious systems.

Specifications

Cebex SBR is suitable for use where specifications call for the incorporation of a styrene butadiene (SB or SBR) polymer admixture.

Limitations

Cebex SBR is not suitable for use in permanently immersed conditions.

Where Cebex SBR is used in thick section screeds, the dosage should be reduced to minimise the possibility of extended setting times due to the increased absorption/evaporation time required to allow the SBR matrix to form.

Properties

| | |
|--------------------------|------------------------|
| Appearance: | White emulsion |
| Specific gravity: | Typically 1.00 at 20°C |
| Chloride content: | Nil to BS 4887 |

Compatibility with other admixtures

Cebex SBR is compatible with other Fosroc admixtures used in the same mix. However, it is generally advised that all admixtures are added separately to the mix.

Compatibility with cements

Cebex SBR is suitable for use with all types of ordinary Portland cements and cement replacement materials such as PFA, GGBS and Silica fume.

Typical dosage

The normal dosage for use of Cebex SBR will typically lie within the range of 10 to 25 litres/100kg of cement. Specifications particularly calling for the use of an SBR polymer admixture often specify a dosage of 20 litres/100kg cement. Dosages outside the quoted range may be used if necessary and appropriate to meet particular requirements. Compliance with requirements should be assessed through trial mixes.

Overdosing

In common with all SBR materials, an overdose of Cebex SBR is likely to result in increased workability and air entrainment. This may make the mix unsuitable for use. Overdosing is also likely to cause extended curing times and may interfere with the hydration of the cement.

Typical performance

The results below are taken from a test programme carried out for the evaluation of Cebex SBR. The examples quoted are representative of the results obtained and provided as illustrations of the performance of the product. In all cases trials should be performed to assess the actual performance of materials under the specific conditions of any intended use.

Mix details

3:1 sand:cement mortar containing Cebex SBR at 20 litres/100kg cement

Air cured

| 28 day tests to BS 6319 | Control | Cebex SBR mix |
|---|---------|---------------|
| Compressive strength, N/mm ² | 46.0 | 52.0 |
| Tensile strength, N/mm ² | 2.2 | 5.5 |
| Flexural strength, N/mm ² | 7.0 | 12.0 |



Instructions for use

Where used as an integral admixture, Cebex SBR should be added to the mix and the water adjusted to give the desired mix workability. It is recommended that normal trial mix procedures are used to determine the exact mix design required to meet specific requirements.

If it is intended to use Cebex SBR in a slurry coat or as a bonding aid for repair of a damaged substrate, it is recommended that the Fosroc Technical Department is contacted for advice on the correct procedures for surface preparation and selection of an appropriate repair material.

Dispensing

The measured quantity of Cebex SBR should normally be added directly to the mix with the mixing water to obtain the best results. The correct quantity should be measured by means of a recommended dispensing system. The Fosroc Technical Department can advise on suitable equipment and its installation and servicing.

Estimating

Packaging

Cebex SBR is available in 210 litre drums, 1000 litre bulk and tanker loads. For larger users, storage tanks and dispensing equipment can be supplied.

Supply

Contact your local Fosroc Sales Department.

Storage

Cebex SBR has a minimum shelf life of 12 months provided the temperature is kept within the range of 2°C to 50°C. If this temperature range is exceeded in any way then advice should be sought from the Fosroc Technical Department.

The product should be protected from freezing as it may not be possible to reconstitute the material after it has been frozen.

Freezing point: Approximately 0°C

Precautions

Health and safety

Cebex SBR should not be swallowed or allowed to come into contact with skin and eyes.

Wear suitable protective gloves and eye/face protection.

Splashes on the skin should be removed with water. In case of contact with eyes rinse immediately with plenty of water and seek medical advice. If swallowed seek medical attention immediately - **DO NOT** induce vomiting.

For further information consult the Product Safety Data Sheet available for this product.

Fire

Cebex SBR is water based and non-flammable.

Cleaning and disposal

Spillages of Cebex SBR may produce a surface and should be absorbed onto sand, earth or vermiculite and transferred to suitable containers for waste disposal. Remnants should be hosed down with large quantities of water.

The disposal of excess or waste material should be carried out in accordance with local legislation under the guidance of the local waste regulatory authority.



Fosroc Limited

Coleshill Road
Tamworth
Staffordshire
B78 3TL
Tel 01827 262222
Fax 01827 262444
www.fosrocuk.com

Important note

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard Conditions for the Supply of Goods and Services, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation, specification or information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation or information given by it.

Cebex SBR is the trade mark of Fosroc International Limited