

# BRIJ SAFECRETE

Waterproofing Solution

Brij safecrete is an Acrylic Polymer which mixes with cement and provides a seamless waterproof coating to concrete and masonry surfaces. It can be used as a waterproofing or protective coating.

## Description

Brij safecrete is an acrylic based Polymer Modified Cementitious Flexible Composite coating system. Brij safecrete in conjunction with cement provides both the properties of plain cement, particularly its poor adhesion properties, low impact strength, low flexural strength and thin section fragility.

Brij safecrete polymer adds to the potential use by enhancing the properties of cement slurry/mortar/concrete by making them an excellent choice for both new construction as well as renovation.

## Technical Support

Brij Additives provides a technical advisory service for on-site assistance where we advise on admixture selection, evaluation, trials and dispensing equipment. Technical data and guidance can be provided for Silcrete and other products.

## Method Of Application

Remove all laitance, oil, grease, mold oil, curing compound, etc. using a wire brush or for large floor areas, a scrubbing machine. Ensure that reinforcing steel is clean and free from grease or oil, remove scale and rust. When repairing damaged concrete, ensure that the exposed surface is smooth and sound. All concrete surfaces should be thoroughly damp prior to the application of Brij safecrete coating. It can be achieved by pouring water on flat surface or by spraying water on vertical/inclined surfaces. Before the coat of Brij safecrete, please make sure that any stagnant water is removed so that surface is only damp. In no case should there be stagnant water.

## Packaging

5Kg, 20Kg, 50Kg, and 200Kg HDPE plastic container.



## Product Pros and Use

- Develops excellent bond to most building materials.
- Can be applied in uniform thickness to horizontal and vertical surfaces.
- Improves mechanical & physical properties of the coating system when used in conjunction with cement.
- Reduces or prevents salt penetration into concrete.
- Resistance to ultraviolet light and chemicals ranging from mild acids to strong alkalis.
- It is highly impermeable in continual wet conditions.
- It is non-flammable and does not give off toxic gases, even when exposed to fire.
- Non toxic

Brij safecrete is used for surface treatment, protecting, waterproofing and repairing concrete and masonry. It is also suitable for waterproofing of basements, toilets, terraces, roofs, swimming pools, water towers as well as general concrete repairs and protection of concrete against corrosion, salt attack and much more.

## Mixing

Brij safecrete polymer is mixed with neat fresh cement in the ratio of 1:2 by weight. The mix has to be stirred thoroughly until smooth homogeneous slurry is obtained. Any lump in the mix should be removed or mixed thoroughly again.



## Coating

The mix has to be applied by brush on rendered surfaces after its damp. Two or more coats are recommended. First coat should be allowed to air dry for 5-6 hours prior to applying a second coat.

## Curing

During the first 12 hours of curing, it must be protected from abrasion, rain and other adverse conditions. No traffic shall be allowed on a Brij safecrete treated surface within 48 hours after application. After application of final coat of Brij safecrete, initial air drying must be done for 2-6 hours. During this period no water is to be used for curing. If unusual conditions such as high temperature, low humidity and high wind condition arises, the coating must be covered with polythene sheet to avoid rapid drying of the coating. After a maximum period of 6 hours of the final application, moist curing must be done for the next 24 hours by way of spraying water on Brij safecrete coating. During this period at no point of time should the Brij safecrete coating should be left neither completely dry nor submerged in water. After the moist curing, the Brij safecrete coating can be air dried for 3 days before submersion in water if required for usage.

## Cautions

Brij safecrete system must be applied at temperatures between 10<sup>o</sup>c to 40<sup>o</sup>c. Brij safecrete should not be used without the addition of cement.

## Yield/Coverage

Safecrete Coating/Slurry

Mix Proportion: 100 kg cement: 50 kg Silcrete

Material	1 coat on concrete Kg/m <sup>2</sup>	2 coats on concrete Kg/m <sup>2</sup>
Cement	0.50	0.75
Safecrete	0.25	0.36

## Tools and Equipment Cleaning

All tools should be clean with water immediate after use.

## Shelf Life

12 months if stored under normal warehouse conditions below 35<sup>o</sup>c, in unopened, airtight containers.

## Health and Safety

Brij safecrete is non-toxic, however gloves and goggles are recommended to be worn to avoid contact in sensitive areas. Any splashes to the skin or eyes should be washed off with clean water. In the event of prolonged irritation, please seek medical advice. Should use a dust mask while handling the powder.

## Fire

Brij safecrete is Nonflammable.

## Properties

Parameters	Test Values -Typical	Protocol
Appearance	Milky white colored free flowing liquid.	Visual
Viscosity, Seconds	12±1	IS 101
Solid content	30± 3 (w/w)	IS 101
pH Value	>7	IS 9103
14 days Bond Strength, N/mm <sup>2</sup>	2.0 (Minimum or concrete failure)	ASTM C 882-87
28 days Compressive strength, N/mm <sup>2</sup>	32 (Minimum)	IS 516
Recoating Time, at 27 <sup>o</sup> c, 65% RH, HOURS	4-5	IS 101
Full Cure	14 days	IS 101
Ash Content, % (w/w)	< 0.9%	IS 101
Volatile organic Matter (VOC) %, (w/w)	< 1.0	IS 101



**WATERPROOFING & REPAIR SOLUTIONS**



**ADMIXTURE SOLUTION**



**ACCELERATOR**

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