SILRES® BS 1001 A

Silane Emulsions

SILRES® BS 1001 A is a stable, VOC compliant, 50% actives silicone emulsion that reduces with water to form a stable penetrating water repellent emulsion. SILRES® BS 1001 A, currently produced in the USA, was developed to treat a wide variety of mineral substrates including architectural concrete, concrete block, splitface block, pavers, stucco, porous and dense brick, clay tile, and exposed aggregate concrete. It has been found to be particularly effective in the Do-It-Yourself (DIY) markets where good water repellency, beading, ease of use and stability are required.
SILRES® BS 1001 A is not recommended for below grade applications where hydrostatic pressure can be significant.

Properties

• Provides excellent water repellency to reduce cracking, spalling, freeze / thaw damage, chemical degradation, biological growth, efflorescence, and dirt pickup, thereby lengthening substrate life maintenance costs
• Provides excellent beading for improved aesthetics
• Superior storage stability including freeze/thaw stability for ease ofuse
• Low VOC emissions upon curing
• Formulated to minimize darkening effects thus not changing substrate appearances
• Good stability on highly alkaline surfacesfor long term durability
• Physically and chemically bonds to substrates increasing coating life and making cleaning easier, thereby reducing maintenance costs
• Applications of SILRES® BS 1001 A are UV stable and resistant to biological degradation for loger service lifeleading to less cost for repetitive applications
• Applications of SILRES® BS 1001 A are vapor permeable to resist cracking, peeling and blistering, and allowing carbonation to continue after coating application. This lengthens coating and substrate lives and allows for greater substrate structural strength over time
• Applications of SILRES® BS 1001 A can improve adhesion of paints mineral substances thus priming them for painting

Technical data

General Characteristics

Property	Condition	Value	Method
Appearance	-	White, opaque emulsion	WSTM 1160
Composition	-	Silane/Siloxane	-
Silicone	-	50.0 wt. %	-
Solvent none	-	none	-

These figures are only intended as a guide and should not be used in preparing specifications.

All the information provided is in accordance with the present state of our knowledge. Nonetheless, we disclaim any warranty or liability whatsoever and reserve the right, at any time, to effect technical alterations. The information provided, as well as the product's fitness for an intended application, should be checked by the buyer in preliminary trials. Contractual terms and conditions always take precedence. This disclaimer of warranty and liability also applies particularly in foreign countries with respect to third parties' rights.

Application details

SILRES® BS 1001 A should be blended with water to achieve the desired concentration before application. Tap water may be acceptable for blending. However, due to the chemical variables in tap water, it is recommended that blended samples are tested prior to the use of tap water. Distilled or de-ionized water is recommended. Two coats of the solution should be applied using a "wet-on-wet" procedure to ensure complete coverage. SILRES® BS 1001 A emulsions can be applied by brushing, spraying or dipping. Maximum water repellency is realized in 72 hours depending on curing conditions. Beading generally improves over time. For most applications dilution rates of 1:4 to 1:9 provide good performance depending on the absorbency of the substrate. A test patch should be performed prior to general application with the customers approval to ensure that desired water repellency and appearance is achieved. Recoatability Substrates which are coated with SILRES® BS 1001 A at dilution rates of 1:3 or higher (125 ft2/gallon) are generally re-coatable with water and solvent borne paints. SILRES® BS 1001 A can be used as a primer to provide improved adhesion with paints on mineral substrates. Clean Up Thoroughly rinse application equipment with clean water. Disposal SILRES® BS 1001 A must be disposed according to local, state and federal regulations. SILRES® BS 1001 A and it's dilutions should be treated as dilute solutions of "silicone resins" which are non-RCRA (Resource Conservation and Recovery Act) or nonhazardous wastes.

Processing

Surface preparation depends on substrate placement, type and strength, curing and finishing processes, age, condition, previous contamination, and the presence of previous coatings as well as the application of SILRES® BS 1001 A. Surfaces should be clean from dust, dirt, oils, grease, curing compounds, other coatings, efflorescence, and laitance before applying SILRES® BS 1001 A. Cleaning methods which are compatible with the application of SILRES® BS 1001 A include:

- **Mechanical** - abrasive blasting (sand, baking soda, vacuum).
- **Chemical** - acid etching, stripping, solvent de-greasing, caustic soda scrubbing, alkaline soap scrubbing, high pressure washing, high pressure washing with sand.
- **Heat** - propane and acetylene torching.

If strongly acidic or caustic cleaning agents are used, neutralize the surface and completely wash to remove any residues. Before using any surface preparation method, a test patch should be performed with the customer's approval to ensure that their needs are met. New concrete should be allowed to cure for at least 28 days before applying SILRES® BS 1001 A. In addition, any repair work should be performed at least 3 days before SILRES® BS 1001 A is applied.

Packaging and storage

Storage

The "Best use before end date" of each batch is shown on the Certificate of Analysis. Storage beyond the date specified on the Certificate of Analysis does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety notes

For specific information regarding safe handling of this material, please refer to the Safety Data Sheet.

QR Code SILRES® BS 1001 A

For technical, quality or product safety questions, please contact:

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