

Silsan[®] ISF

Silicone resin binder for interior paints and plasters

Product description

Silsan[®] ISF is a crosslinking polysiloxane with resin character.

It is used as a co-binder in aqueous, breathable silicone resin paints and silicone resin plasters, particularly for interior applications.

Silsan[®] ISF is a solvent free, aqueous emulsion which can be diluted in water and which forms the binding system of the coating together with a suitable polymer emulsion.

The product forms a film. However, in contrast to typical methyl silicone resin emulsions, the silicone film forms more slowly.

Among the many benefits obtained when using Silsan[®] ISF for interior applications, it is in particular the delayed film development and crosslinking which can positively influence the workability of the coating.

Further advantages of Silsan[®] ISF are:

- Exceptional water repellence in combination with high water vapour and CO₂ permeability.
- Through the delayed film forming, the open time of the coating is extended facilitating the application in particular on absorbent substrates and effectively preventing deflagration of the coating.

- Irregular transition lines and streaking effects (especially under lateral light), which may occur during the application are reliably avoided.
- Due to the ability of Silsan[®] ISF to open the structure of the acrylic binder at a micrometric level, the coating is given a natural matt, microporous appearance.
- There is no special priming or substrate conditioning required, so coatings made with Silsan[®] ISF are also perfectly suited for renovations.

The specific chemical silicone structure of Silsan[®] ISF based on crosslinking polysiloxanes allows the formulation of cost-efficient coatings.

The fact that the product is highly effective even in low quantities helps to further reduce the costs.

Silsan[®] ISF is suitable to be used with the most common masonry coating systems such as:

- Emulsion based paints and plasters
- Silicone resin paints and plasters
- Emulsion-silicate paints and plasters

Application

The quantity of Silsan[®] ISF required depends on the formulation of the coating system.

The following levels are recommended as a guideline:

Emulsion based interior paints:	1 to 2 %
Emulsion based interior plasters:	1 to 2 %
Interior silicone resin paints:	4 to 8 %
Interior silicone resin plasters:	2 to 4 %
Emulsion-silicate paints:	1 to 3 %
Emulsion-silicate plasters:	1 to 3 %

(each related to the total formulation)

Depending on the type of the coating system and relevant to its total formulation, 10 to 17% of a suitable polymer dispersion must be added.

The product can be added during the dispersing phase as well as at the end of the production process.

Storage

The packages must not be exposed to direct sunlight and must be protected from heat.

If subjected to frost, the product will become unfit for use.

We recommend a storage temperature within a range of + 5 to + 25 °C.

In originally sealed containers, Silsan[®] ISF may be stored for a maximum of 12 months after the date of delivery.

Product properties of Silsan[®] ISF

Properties	Value
Composition	stable emulsion based on modified polysiloxanes
Appearance	viscous, milky-white
Active content	approx. 50 %
Type of solvent	solvent free
Solubility	water dilutable
Flash point	> 100 °C
Viscosity (at 20 °C)	>400<1200 cSt
Density (at 20°C)	approx. 1.0 g/ccm
pH value	>7< 9
Packaging	plastic canisters, plastic drums*, IBC
Storage stability	approx. 12 months at + 5 to + 25 °C

Note:

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

* Packaging and transport information:

For reasons of safety during the transportation of plastic drums, please observe the following packaging units when placing your order:

55 kg plastic drums: 6 x 55 kg or 12 x 55 kg on a pallet
145 kg plastic drums: 5 x 145 kg on a pallet

Special storage and recommendations for use:

- Store the product in a cool, dark place
- In order to prevent contamination with bacteria and fungus spores from the ambient air, the containers should only be opened to remove the product required and be subsequently closed once more. In particular when using plastic drums, see that no dust or dirt from the atmosphere falls into the open drum.
Close the drum immediately after the product has been taken out.
- When a dipper is used, it must be cleaned thoroughly before immersion.
- Once the containers have been opened, use up the complete contents as quickly as possible.

The data presented in this leaflet are in accordance with the present state of our knowledge, but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this leaflet should be checked by preliminary trials in order to provide for local processing conditions over which we have no control, especially where other companies' raw materials are also being used. The recommendations do not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the products for a particular purpose.