

Technical Data Sheet

Silsan[®] WDF

Silicone Water Repellent Additive

Product description

Silsan[®] WDF is a highly concentrated, solvent and water-free water repellent additive based on modified, functional polysiloxanes, to be used as an additive in aqueous and paste-like coatings.

The water repellent effect of the coating is greatly increased and the absorption of water (w_{24} value) is reduced to a minimum without any negative effect on the water-vapour permeability (sd value).

Silsan[®] WDF is especially suited to be used as a water repellent additive in reinforcing filler pastes, fillers and joint compounds for interior and exterior use.

It can also be used to reduce the capillary water absorption of silicate and emulsion-silicate based coatings.

When used together with the silicone resin binders Silsan[®] DSH or Silsan[®] HSB, Silsan[®] WDF enhances the water repellent effect of those binders.

Application

Silsan[®] WDF has an active content of 100 % and is added to the aqueous coating system undiluted during or after the production process.

It is vitally important to ensure that the coating is thoroughly mixed after Silsan[®] WDF has been added.

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

The following levels are recommended as a guideline:

reinforcing filler pastes,
fillers and
joint compounds: 0.5 to 1.0 %

silicate and
emulsion-silicate coatings: 0.3 to 0.5 %

(percentages as a share of total final mass)

Storage stability

The packages must not be exposed to direct sunlight or frost.

A storage temperature within a range of + 5 to + 25 °C must be guaranteed.

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

Product properties of Silsan® WDF

Properties	Value
Composition	mixture based on modified, functional polysiloxanes
Appearance	liquid, clear to slightly cloudy
Active content	100 %
Type of solvent	solvent-free
Solubility	water insoluble
Boiling point	n.a.
Viscosity (at 20 °C)	>700<1500 cSt
Density (at 20 °C)	approx. 1,0 g/ccm
pH value	n.a.
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, wrapped in cardboard
145 kg plastic drums: 5 x 145 kg on a pallet

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.