

Technical Data Sheet

Silsan[®] ZEK

Silicone Water Repellent Powder

Product description

Silsan[®] ZEK is a water repellent powder comprising a water repellent mixture of Silanes and Siloxanes.

Silsan[®] ZEK is suitable for enhancing the water repellency and water resistance of mineral, cement construction materials such as premixed plasters (especially based on cement and lime), joint mortars and powder paints. It can be used in both dry powder and liquid coating systems. It can therefore also be used for manufacturing paste products such as fibre cement, mortars pastes as well as plaster pastes and other coatings.

The product exhibits the following properties:

- Very low water absorption combined with high water vapour permeability
- Excellent beading effect on the surface
- Low soiling tendency
- Reliable and long-lasting water repellency

Silsan[®] ZEK is suitable to be used with the following coating systems:

- Mortars and adhesives based on cement and lime
- Mortars and adhesives based on silicates
- Mortars and adhesives based on synthetic resins
- Joint mortars

- Tile fillers
- Powder paints

Application

Silsan[®] ZEK has an active content of 100% and is added to the powder coatings during or after the manufacturing process. The quantity of Silsan[®] ZEK required depends on the formulation of the coating system whereby even low quantities achieve very low water absorption and good durability.

Adding a quantity of 0.15 – 0.5 % relative to the dry weight of the coating system can be seen as a guideline.

After sufficient water has been added, the treated material can be stirred by hand or by machine.

Storage stability

The packages must not be exposed to direct sunlight or frost and should be stored within a temperature range of + 5 to + 25 °C.

The product must be stored under dry conditions.

In originally sealed bags, Silsan[®] ZEK may be stored for a maximum of 12 months from the date of delivery.

Even after shelf life has expired, the product isn't necessarily unfit for use. However, in such case, we highly recommend to inspect the product regarding its condition as well as potential pickup of environmental moisture.

Precautions:

For further information regarding the personal protective equipment (PPE) that must be worn during manufacturing and application as well as safety precautions that must be arranged during transport and storage of the product please refer to the latest material safety data sheet.

Product properties of Silsan® ZEK

| Properties | Value |
|----------------------|--|
| Composition | polymer mixture of silanes and silicone resins, amorphous silica |
| Appearance | white powder |
| Active content | n.a. |
| Solubility | water insoluble |
| Flashpoint | n.a. |
| Viscosity (at 20 °C) | n.a. |
| Density (at 20 °C) | approx. 0.3 g/ccm |
| Packing | 25 kgs paper bags, one pallet = 21 x 25 kg (525 kgs) |
| 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.

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.