

Technical Data Sheet

Silsan[®] Perl 66

Silicone Water Repellent Additive with Strong Beading Effect

Product description

Silsan[®] Perl 66 acts as a water repellent agent as well as a water beading effect additive in aqueous coating systems such as dispersion based paints and plasters. Given a proper composition of the coating, Silsan[®] Perl 66 particularly creates a water beading effect. The absorption of water (w_{24} value) is reduced to a minimum without any negative effect on the water-vapour permeability (sd value).

When used together with the silicone resin binders Silsan[®] HSB or Silsan[®] WR2100, the Silsan[®] Perl 66 acts as an intensifier of the water repellent effect of those binders. Even though silicone resin binders provide very good water repellent effects by themselves, this effect can be further enhanced considerably by adding Silsan[®] Perl 66.

As, in contrast to other typical silicone emulsions, Silsan[®] Perl 66 does not contain emulsifiers which, due to their hydrophilic character, might affect the hydrophobic properties of the additive, Silsan[®] Perl 66 acts highly effective. Consequently, Silsan[®] Perl 66 can be used as a water beading effect additive in suitable coating systems on the one hand as well as a simple hydrophobic additive in any aqueous coating on the other.

Due to its high alkaline resistance, Silsan[®] Perl 66 perfectly suits to be used as a hydrophobic additive in silicate and dispersion-silicate coatings.

Silsan[®] Perl 66 is suitable to be used with the following masonry coating systems:

- Silicone resin paints and plasters
- Dispersion based paints and plasters
- Silicate based paints and plasters
- Siloxanic paints
- Paste form mortars and grouts
- Paste form reinforcing and base coat mortars

Application

Silsan[®] Perl 66 is directly added to the aqueous coating systems. Ideally, the product is added at the final production stage at the recommended dosage. Good embedding by mixing the product well is vitally important.

The quantity of Silsan[®] Perl 66 required depends on the formulation of the coating system.

The following levels are recommended as a guideline:

When used as a hydrophobic additive in silicone resin paints and plasters (in combination with about 3 to 6 % of our silicone resin binder Silsan[®] HSB for example):

0.5 to 1.5 %

When used as a hydrophobic additive in siloxanic paints or plasters:

1 to 1.5 %

When used as a hydrophobic additive in dispersion based paints and plasters:

1 to 2 %

When used as a water beading effect additive in suitable dispersion based coating systems:

4 to 7 %

(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® Perl 66 may be stored for maximum of 12 months after 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 suitability before using it.

Product properties of Silsan® Perl 66

Properties	Value
Composition	mod. siloxanes / silanes in combination with high molecular hydrocarbons
Appearance	clear, liquid
Active content	approx. 50 %
Type of solvent	de-aromatized hydrocarbons, VOC-free
Solubility	water insoluble
Flashpoint	n.a.
Viscosity (at 20 °C)	>50<250 cSt
Density (at 20°C)	approx. 0.9 g/cm ³
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:

50 kg plastic drums: 6 x 50 kg or 12 x 50 kg on a pallet, wrapped in cardboard

135 kg plastic drums: 5 x 135 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.