

SILLITIN V 85

Field of application: Paint & Varnish

1. Description

SILLITIN V 85 is a natural combination of corpuscular silica and lamellar kaolinite. These two elements together form a loose structure which offers particular advantages in terms of application possibilities when used as a functional filler.

Characteristics

Appearance	free-flowing powder	
Color CIELAB scale:	L*	93.5
	a*	1.0
	b*	9.0
Residue > 40 µm	30 mg/kg	
Volatile matter at 105 °C	0.5 %	
Density	2.6 g/cm³	
Particle size distribution	D ₅₀	5.0 µm
	D ₉₇	18.0 µm
Surface area BET	10 m²/g	
Oil absorption	45 g/100 g	
Electrical conductivity	80 µS/cm	
Refractive index n	1.55	

Packaging

Paper bags	à 25 kg
EVA bags	≤ 20 kg
Big Bags	750 - 1200 kg
Bulk	≤ 25 t

Shelf life

Unlimited if stored properly under dry conditions.



2. Applications

In paint and varnish applications SILLITIN V 85 can be used as a functional filler either on its own or combined with extenders or flatting agents.

Information on compliance with certain regulations/recommendations and other safety-related aspects: [Product safety information](#)

Fields of application

- emulsion and silicate paints (exterior and interior emulsion paints)
- industrial paints
- wood and foil coatings
- primers and fillers
- sealing and embedding compounds

It stands out for its excellent dispersion properties and relatively low yield point with a high solids content, high abrasion resistance and very good flatting effect.

In unpigmented coatings it achieves good transparency with a low yellow tinge.

Formulation principle:

solvent-based, solvent-free, water-based

Hardening principle:

all conventional reaction types, also UV-curing

Minimum film thickness:

> 20 µm, less in special cases

Metering:

up to 55 % depending on intended application



3. Benefits

- high filling ratio
- outstanding dispersion behavior
- good pigment dispersion (spacer effect)
- relatively low abrasiveness
- low tendency to settle
- good wet edge strength
- quick drying
- weathering resistance
- breathability
- scratch resistance
- high abrasion resistance
- good transparency
- very good flatting effect
- complies with the standards on basic foodstuffs of the BfR and FDA

Comparison of properties

	SILLITIN V	SILLITIN N	SILLITIN Z	SILLIKOLLOID P
Viscosity	•	••	•••	••••
Yield point	•	••	•••	••••
Sedimentation	••••	•••	••	•
Flatting	••••	•••	••	•

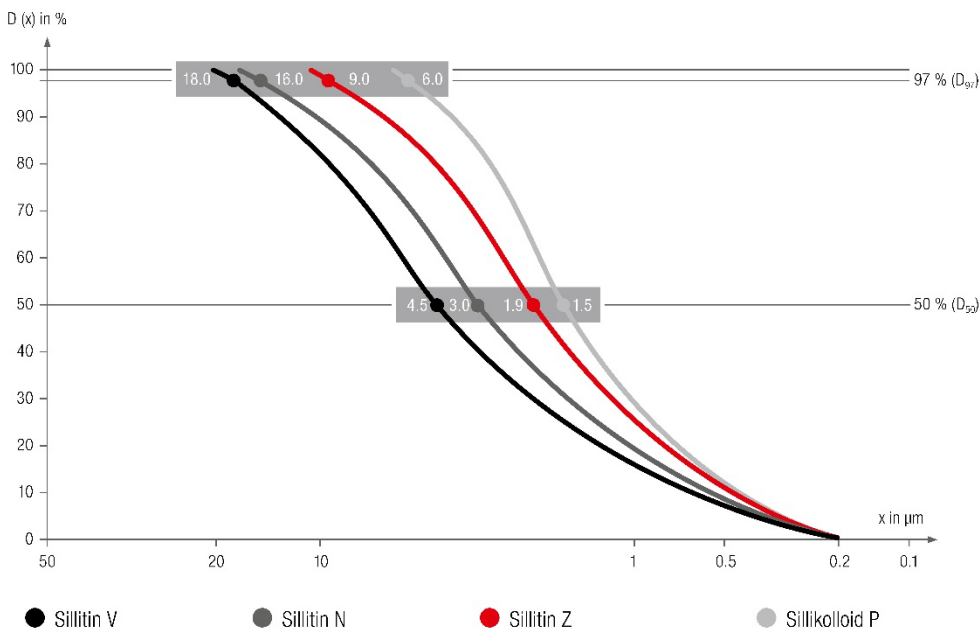
• = low •••• = high



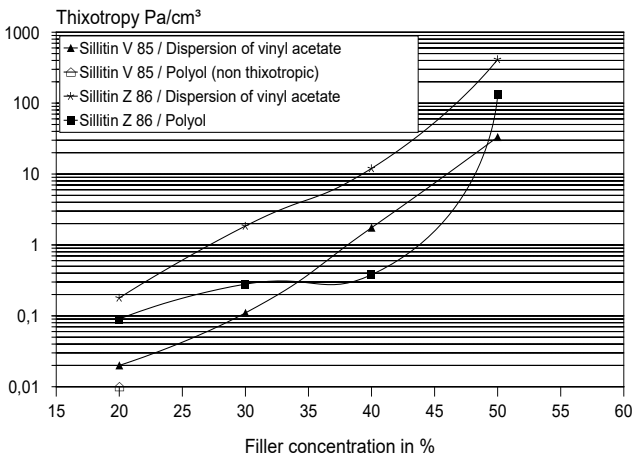
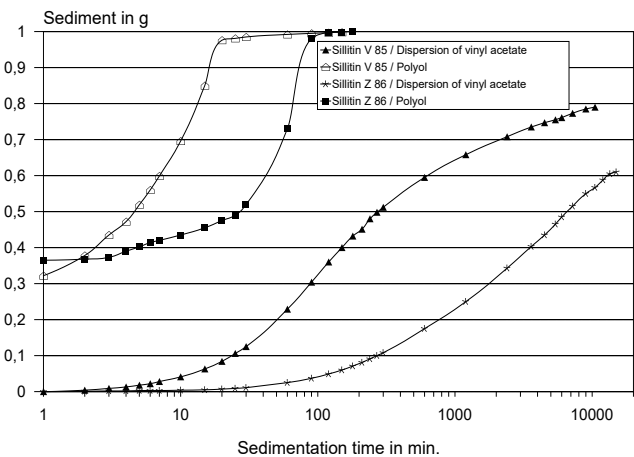
4. Particle size distribution

The measurement method for these particle size distributions is based on the Fraunhofer diffraction spectrum. The analyses were carried out with Mastersizer 3000, a laser apparatus of Malvern.

Important:
The data on particle size distribution is highly dependent upon the method used, test preparations and the measuring device itself. As a result the values given may not be directly comparable with those provided by another manufacturer.
If you have any queries please contact us direct.



5. Sedimentation and Rheology



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