

SILICELL

Silicell fumed silica is a versatile, efficient additive used by adhesive and sealant manufacturers to achieve desirable performance characteristics in their products. This fine powder is an important ingredient in epoxies systems.

Silicell : High purity grade (>99.8 %) and surface untreated : hydrophylic

Silicell H2 : Surface treated : hydrophobic. This quality can be blend with polyurethane formulation.

The refractive index of Silicell is 1.46, similar to several polymers such silicone, epoxies and acrylics. This, together with the small size of the aggregates, allows polymers to retain their clarity.

Silicell fumed silica is used to impart five major properties in adhesives and sealants :

- 1- Flow control, including thickening and thixotropy
- 2- Anti-setting during storage
- 3- Extrusion control during application
- 4- Anti-sag during cure
- 5- Reinforcement, such as to improve tear strenght of the cured sealant, and cohesive and adhesive properties of cured bond

Silicell

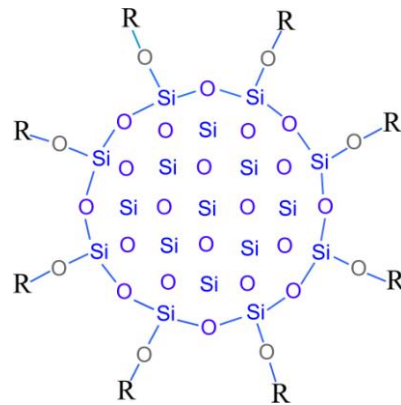
Silicell H2

		Fluffy white powder	Fluffy white powder
Appearance		Fluffy white powder	Fluffy white powder
Cas Number		112945-52-5	67762-90-7
Nature		Hydrophilic	Hydrophobic
BET surface	m ² / g	200	100
Average primary particle size	nm	12	14
Tapped density	g / l	50	50
Moisture at leaving plant	%	< 1.5	< 0.5
Ignition loss (2 h 1000 °C)	%	< 1	4 to 6
Carbon content	%	Na	3.5 to 5
PH value (4% in water)		3.7 to 4.7	4 to 6
SiO ₂	%	> 99.8	> 99.8
Al ₂ O ₃	%	< 0.05	< 0.05
Fe ₂ O ₃	%	< 0.003	< 0.01

Thixotropic effect		33	333
Anti-setting effect		33	333
Clarity		33	3
Improvement of flow of powders		33	333
Defoaming effect		33	3
Level to achieve thixotropic		33	333

Packaging

50 g	1 litre
250 g	5 litres
1.2 kg	30 litres
10 kg	150 litres



Physiological Acceptability

It has been proven that there is no risk of silicosis contraction.

TLV in USA : 20 mpccf MAK in Germany : 6 mg /m³

Consult complete FDS.