

## TDS - Technical Data Sheet

### Production information

#### Grade: ZEO5

**1. General description:** The nano-structure of silica grade ZEO5 can be used in the adhesive industry as a rheological control additive due to its suitable specific surface area and low specific weight due to its fine particle size. This grade is synthetically produced amorphous silicon dioxide (SiO<sub>2</sub>).

**2. Application:** The nano-structure of silica grade ZEO5 increases the mechanical strength of the adhesive such as elongation and shear by increasing its concentration. Because the polymers used in the adhesive industry have a refractive index close to that of silica. Nano structured silica can produce adhesives with high quality and transparency.

### 3. Specification

Properties	Units	Value
Specific surface area (BET)	m <sup>2</sup> /g	350-400
pH-value (in 5% dispersion in water)	Wt%	6-7
Loss on drying (2h @ 105°C)	Wt%	<5
Particle size agglomerates (D90) (FESEM)	micrometer	<3
Particle size (TEM)	nanometer	15-20
SiO <sub>2</sub> content (based on heated at 1000°C for 2 h)	Wt%	>99
DBP absorption	g/100g	220-250
Tamped density	g/L	70-90
Appearance	Ultra fine, White, Amorphous Powder	
Packaging	10 Kg	
Storage time & place	2 years & closed and dry environment	