

TDS - Technical Data Sheet

Production information

Nano- structured of silica Heat Resistant Grade (ZEO10)

1.General description: Nano-structured of silica (ZEO10) plays a very important role in the production of heat-resistant materials due to its unique properties, including high heat resistance, chemical stability and insulating properties. This grade is produced synthetically under the name of amorphous silicon dioxide (SiO₂).

2.Application: Nano-structured of silica (ZEO10) is used in the production of fire-resistant building materials, thermal insulation and heat-resistant paints, in the production of electronic components that are exposed to high heat, and in the production of automobile parts that are exposed to high heat.

3. Specification

Properties	Units	Value
Specific surface area (BET)	m ² /g	150-170
pH-value (in 5% dispersion in water)	Wt%	6-7
Loss on drying (2h @ 105°C)	Wt%	<5
Particle size agglomerates (D90) (FESEM)	micrometer	<12
Particle size (TEM)	nanometer	15-20
SiO ₂ content (based on heated at 1000°C for 2 h)	Wt%	>98
DBP absorption	g/100g	200-210
Tamped density	g/L	120-140
Appearance	Ultra fine, White, Amorphous Powder	
Packaging	10 Kg	
Storage time & place	2 years & closed and dry environment	