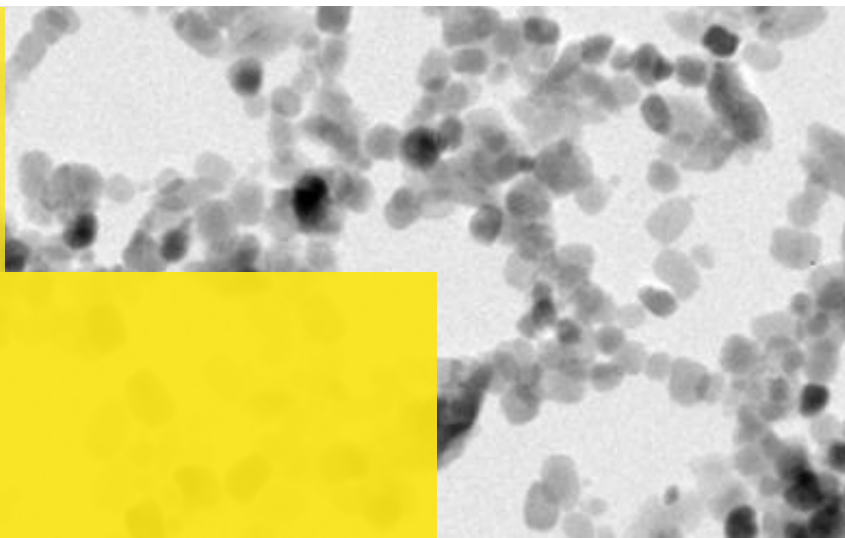




ZrO₂

Zirconia datasheet



Our offer

We offer non-stabilized zirconia nanoparticles in suspension for a wide range of applications. Our nanoparticles can be used as fillers in composite materials, for example as radiopacifier in dental composites. They are compatible with all dental monomers.

In coatings, their high refractive index and good abrasion and scratch resistance are beneficial. They can also be used in ceramic filters, as well as for catalysis and thermal insulation.

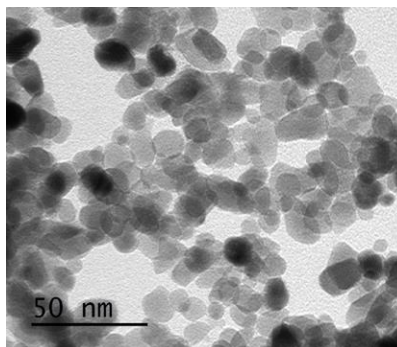
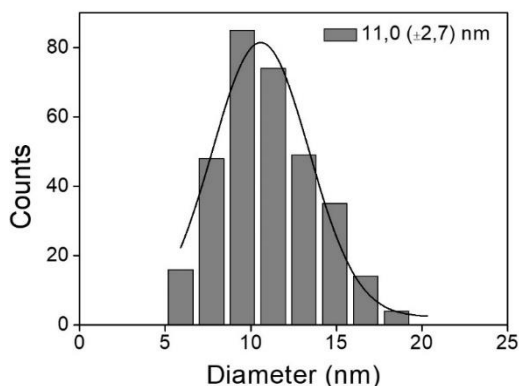
Main benefits

- Small particle size
- High specific surface area
- High translucency
- Low viscosity
- Absence of agglomerates

Properties

Main characteristics	
Chemical formula	ZrO ₂
Crystal structure	Tetragonal, mix of tetragonal and monoclinic
Morphology	Nearly spherical
Density	5.7 g/cm ³
Average particle size	4 – 50 nm
Refractive index	2.16
Suspension solid content	Up to 70% depending on size and dispersion medium
Dispersion medium	Water, alcohol, acetone, polyol, methacrylate-based dental resin, apolar organic solvent, silicone oil, customer specific monomer mixture
Type of functionalization	Depends on dispersion medium and application requirements

Size distribution



Packaging

Available sample size : 10 g to 200 g of dry matter - Safety Data Sheet available