



CaF_2

Calcium fluoride datasheet

Our offer

We offer calcium fluoride dispersions to be used as remineralizing agents in dental composites and dental varnishes. Their bioactivity is due to calcium and fluoride ions release and are compatible with all dental monomers.

Our calcium fluoride dispersions can also be used in anti-reflective coatings to increase light transmission and ensure good mechanical resistance. The refractive index of calcium fluoride is lower than that of metal oxides.

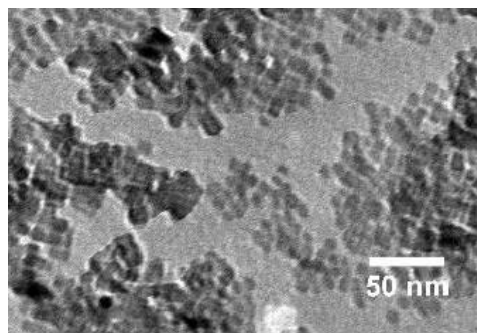
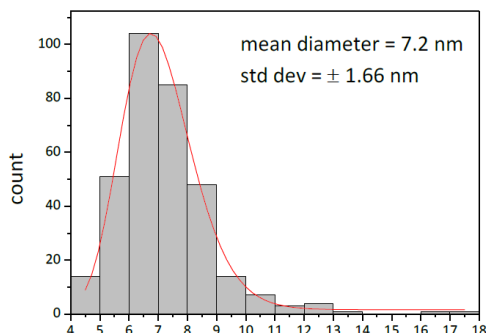
Main benefits

- Smallest CaF₂ particles on the market
- Highest solid content
- High translucency of dental composites
- High depth of cure of dental composites

Properties

Main characteristics	
Chemical formula	CaF ₂
Crystal structure	Cubic
Morphology	Spherical or cubic
Density	3.2 g/cm ³
Average particle size	8 – 20 nm
Refractive index	1.43
Suspension solid content	Up to 50% depending on dispersion medium
Dispersion medium	Water, alcohol, acetone, methacrylate-based dental resin, customer specific monomer mixture
Type of functionalization	Depends on dispersion medium and application requirements
Viscosity (example 1)	CaF ₂ in UDMA (20wt%) : 200 Pa.s (shear rate : 0.1s ⁻¹)
Viscosity (example 2)	CaF ₂ in TEGDMA (30wt%) : 40 Pa.s (shear rate : 0.1s ⁻¹)

Size distribution



Packaging

Available sample size : 5 g to 100 g of dry matter - Safety Data Sheet available