



YbF_3

Ytterbium trifluoride datasheet

Our offer

We offer YbF₃ dispersions to be used as radiopacifiers in dental composites. Our suspensions contain the smallest YbF₃ nanoparticles available on the market and exhibit the highest available solid contents. They are compatible with all dental monomers.

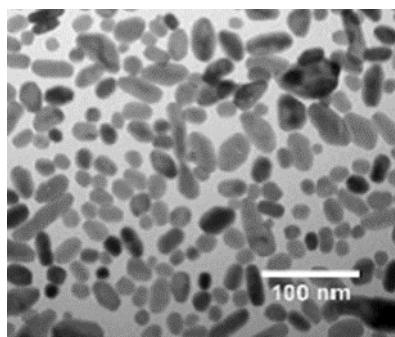
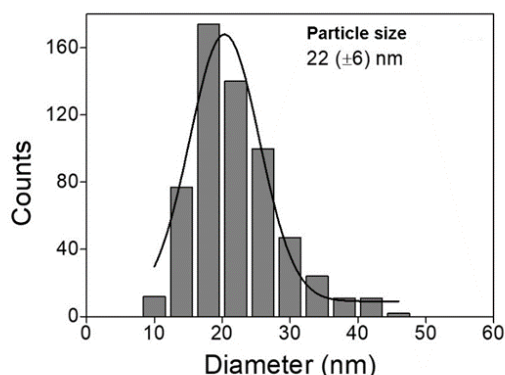
Main benefits

- High translucency of dental composites
- Higher depth of cure
- Improved flexural strength
- Increase in filler concentration becomes possible

Properties

Main characteristics	
Chemical formula	YbF ₃
Crystal structure	Orthorhombic
Density	8.2 g/cm ³
Average particle size	14 – 45 nm
SSA	Up to 25 g/m ²
Refractive index	1.53
Suspension solid content	30 – 70 wt% depending on dispersion medium
Dispersion medium	Water, alcohol, polyol, acetone, methacrylate-based dental resin and customer specific monomer mixture
Type of functionalization	Depends on dispersion medium and application requirements
Viscosity (example 1)	YbF ₃ in UDMA (30wt%) : 50 Pa.s (shear rate : 1s ⁻¹)
Viscosity (example 2)	YbF ₃ in TEGDMA (50wt%) : 6.9 Pa.s (shear rate : 1s ⁻¹)

Size distribution



Packaging

Available batch and sample size : 10 g to 10 kg of dry matter - Safety Data Sheet available