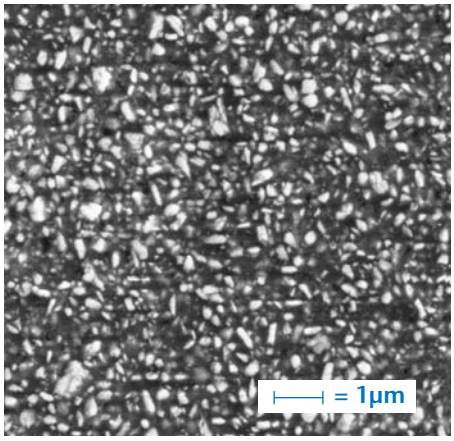
NEW | SCHOTT NanoFine™ 180

Product Information

SCHOTT goes nano with its new grain size SCHOTT NanoFine™ 180. Filling the gap between UltraFine powders and the common nano powders, this grain size can open up new dimensions of filler load, transparency and polishability.

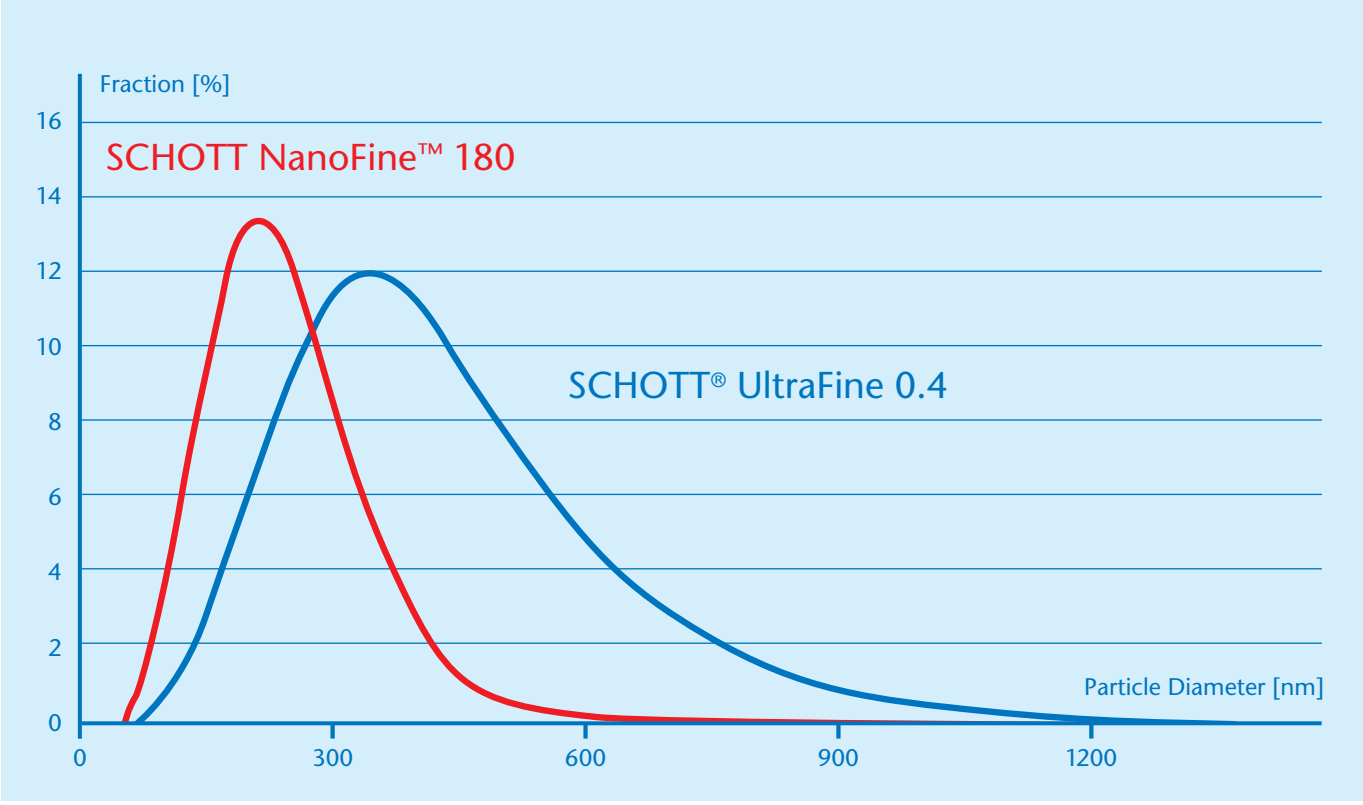


SEM image of SCHOTT NanoFine™ 180 dispersed in monomer (cured)

Advantages

Dental glasses going nano:

- First refractive index matching radiopaque glass < 200 nm (d_{50})
- Ideal compatibility to the established GM27884 powders, other glasses to follow soon
- Extremely narrow grain size distribution
- Easy to disperse



Particle distribution SCHOTT NanoFine™ 180 in comparison to SCHOTT® UltraFine 0.4

SCHOTT
glass made of ideas

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Grain size specification

Type	Description	Size	Grain size	
			d_{50} [nm]	d_{99} [nm]
NF	Special submicron grind	NF180	180 ± 30	≤ 500

Grain size description d_{50} (d_{99}): Equivalent diameter, for which the distribution sum has the value of 50% (99%).

Materials Data:

		GM27884
Expansion coefficient (-30/+70 °C)	10^{-6}/K	4
Index of refraction n_d		1.53
Density	g/cm³	2.8
Transformation temperature (ISO 7884-8)	°C	665
Radiopacity (acc.ISO 4049) as thickness of aluminium equal to 2-mm thick glass material	mm	4.2 (210%)
Hydrolytical resistance (DIN ISO 719)		Class 1
Composition (approx. values) [weight-%]	SiO_2	55
	BaO	25
	B_2O3	10
	Al_2O_3	10

NanoFine 180 powders are available for glass type GM27884. Other glass types to follow soon.

For more information:

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