

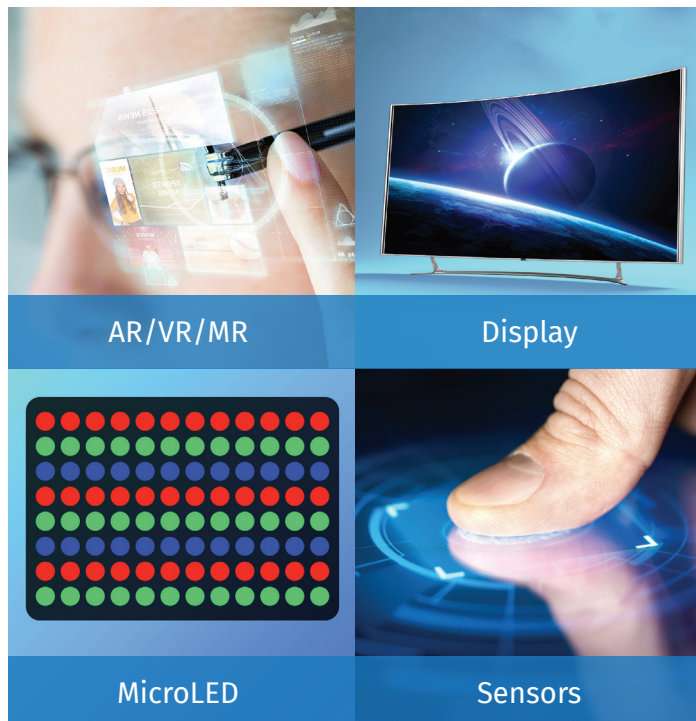
PixClear® TiO₂ Nanocrystal Products

Target Applications

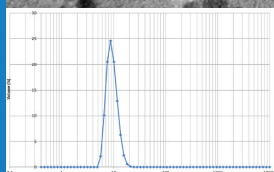
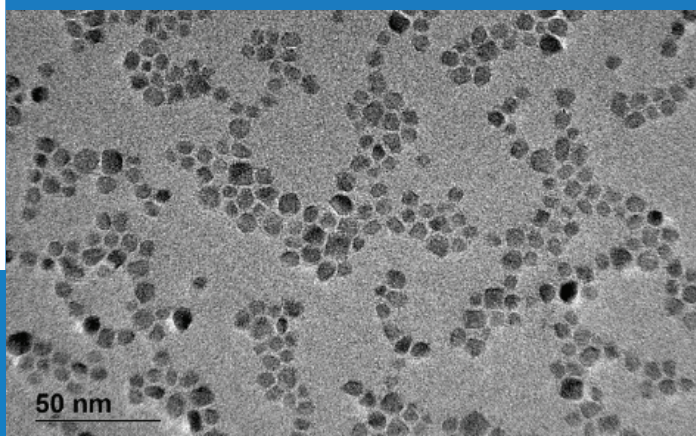
- » Extended Reality – AR/VR/MR
- » OLED Displays
- » QLED Displays
- » Mini / Micro LED
- » Optical Sensors
- » Diffractive Optical Elements

Benefits

- » Highest RI Available
- » Wide Compatibility with Various Resin Systems
- » Uniform Particle Size with No Aggregation
- » Low Haze, High Transparency
- » Integrates Easily with Nanoimprint and Inkjet Processes

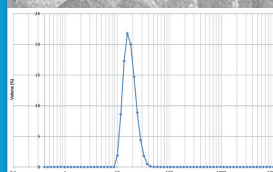
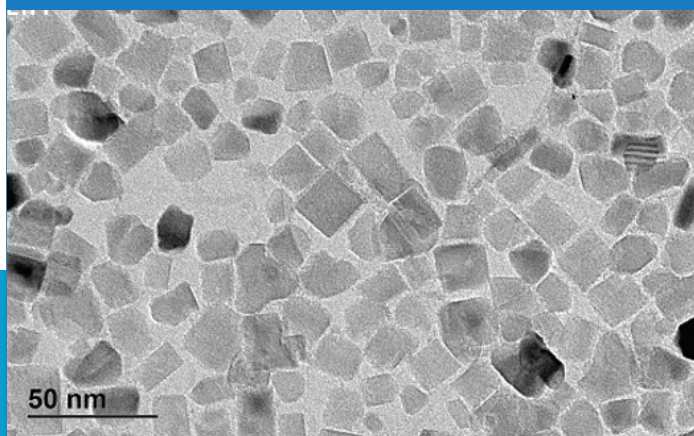


SMALL TITANIA - PTPG



- » 10nm Capped TiO₂ Nanocrystal
- » >1.90RI at 550nm
- » Haze <0.20%
- » Transparency of >99%

LARGE TITANIA - LTPF



- » 20nm Capped TiO₂ Nanocrystal
- » >2.00RI at 550nm
- » Haze <0.50%
- » Transparency of >91%

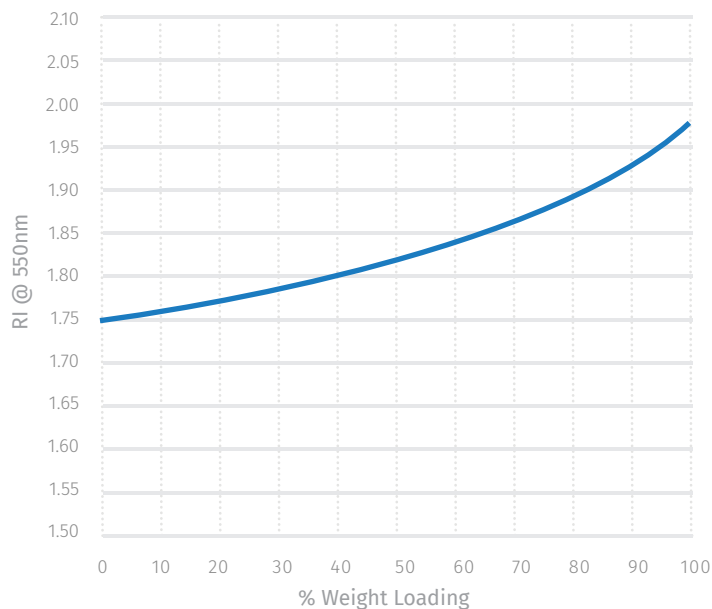
Technical Data

(TiO₂ IN HIGH INDEX MONOMER)

PTPG

10NM CAPPED NANOCRYSTAL

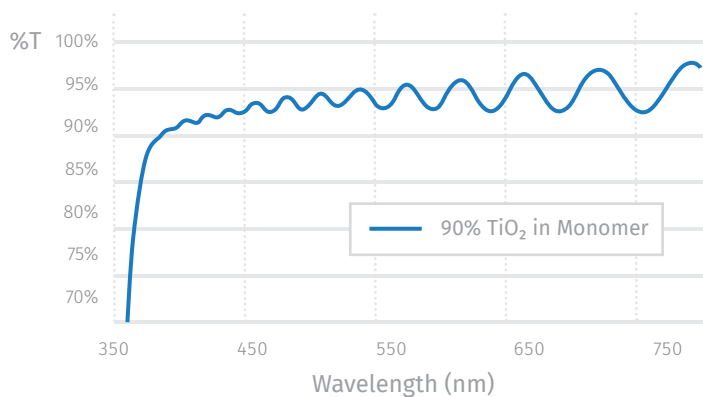
Refractive Index



— 1.750RI Monomer

*Calculated RI based on 1.75RI monomer @550nm

% Transmission

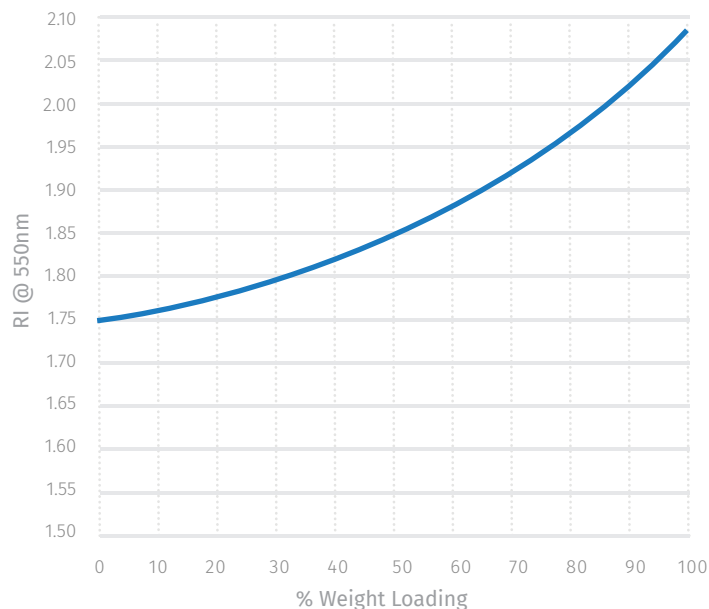


Measured using 2µm Film with Pixlligent Monomer

LTPF

20NM CAPPED NANOCRYSTAL

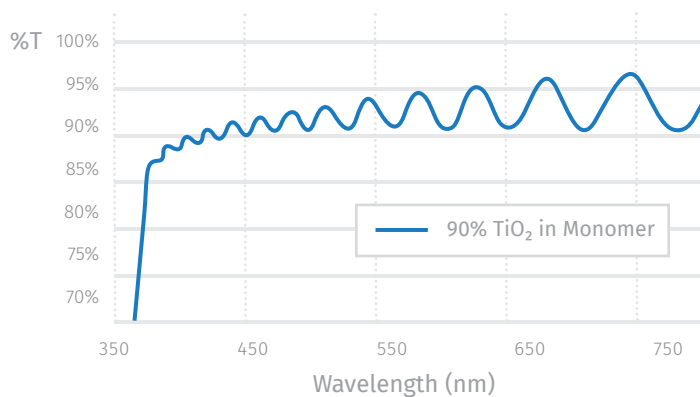
Refractive Index



— 1.750RI Monomer

*Calculated RI based on 1.75RI monomer @550nm

% Transmission



Measured using 2µm Film with Pixlligent Monomer

PTPG (wt%)	Vol. (%)	Film RI (@550 nm)	%T	Haze.
50%	29	1.815	97.5%	<0.20%
70%	49	1.860	96.5%	<0.20%
90%	79	1.926	94.0%	<0.20%

LTPF (wt%)	Vol. (%)	Film RI (@550 nm)	%T	Haze.
50%	29	1.844	97.3%	<0.50%
70%	49	1.909	95.1%	<0.50%
90%	79	2.010	92.2%	<0.50%