

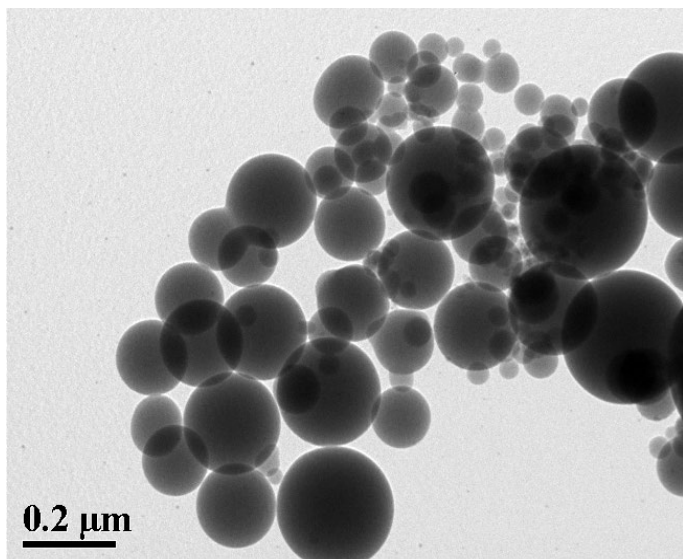
SUNSPHERES™ 200 Nm ST – 3

(Surface Treated*)

The Sunsppheres™ 200 Nm ST- 3 are surface treated*, optically clear, solid microspheres designed for optimum dispersion in coatings, inks, adhesives, and thermoplastics. Cured films show enhanced physical and mechanical properties including increased corrosion resistance, reduced shrinkage, improved adhesion, and enhanced surface qualities such as mar and scratch resistance. This product is particularly useful in improving impact resistance. The Sunsppheres™ 200 Nm ST-3 sub-micron sized spheres space pigments for optical effects, improve color density, and promote efficient and thorough curing of coatings with ultraviolet radiation.

*The Sunsppheres™ 200 Nm ST-3 microspheres are surface treated with a methacryl-functional silane for improved dispersion and reaction into polymers such as unsaturated polyester, acrylates, and vinyl esters.

The Sunsppheres™ 200 Nm efficiently transmit ultraviolet and visible light from 200 nanometers through the visible spectrum, while absorbing in the IR range. These engineered fused, amorphous silica microspheres are resistant to temperatures greater than 1000° C and are chemically stable in a vast range of resins and pH. Dosage is typically 3-12% by total weight of the finished composition. The average particle size is 200 nanometers and range in size from 50 to 500 nm.



Sunsppheres™ 200 Nm.

PHYSICAL & CHEMICAL PROPERTIES:

Refractive Index	1.46 (N_D)
Softening Temperature	>1000° C
Strain Point	>600° C
Coefficient of Thermal Expansion	0.48 x 10⁻⁶/K
DC Resistivity	1 x 10⁸
Hardness (Mohs) Scale	> 8.0
BET Surface Area (sq.m/g)	23.52
pH	4.60
Oil Absorption	3
Moisture	0.07%
Crushing Strength	>60,000 psi
Appearance	Fine White Powder
X-Ray Form	Amorphous
SiO₂	99.99%
Na₂O	2 ppm
K₂O	2 ppm

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See reverse side for additional information



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