

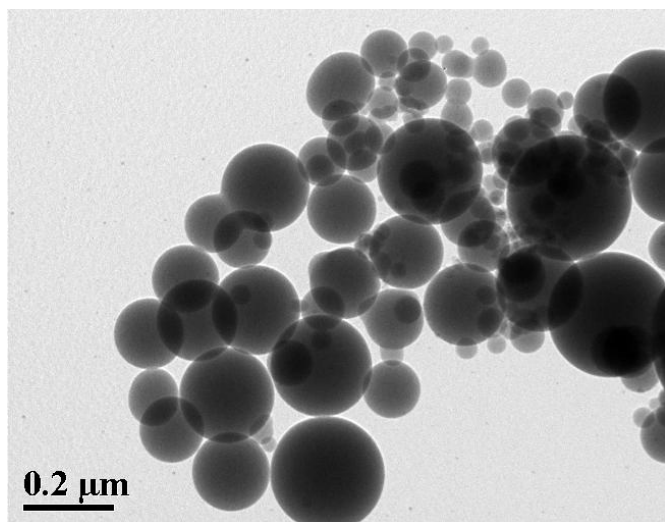
SUNCOLOR CORPORATION

ADDITIVES FOR COATINGS, INKS, ADHESIVES & THERMOPLASTICS

SUNSPHERES™ 200 Nm

The Sunsppheres 200 Nm are 200 nanometer optically clear, solid nanospheres designed for use in a wide variety of composites, coatings, inks, adhesives, powder coatings, and thermoplastics. These nanospheres can be used to improve physical and mechanical properties including reduced shrinkage, improved adhesion, impact resistance, and enhanced surface qualities such as hardness, mar and scratch resistance. The Sunsppheres 200 Nm space pigments for optical effects and improve color density. These nanospheres are particularly useful in formulating corrosion resistant high solids and UV curable primers. The dielectric properties and very high electrical receptivity of these materials over a wide range of temperatures, together with their low thermal conductivity allow their use as an electrical and thermal insulating material in a range of environments.

The Sunsppheres 200 Nm efficiently transmit ultraviolet and visible light from 200 nanometers through the visible spectrum. They promote efficient and thorough curing of coatings with ultraviolet radiation. These engineered fused, amorphous silica nanospheres are resistant to temperatures greater than 1000 degrees C. and are chemically stable in a vast range of resins and pH. Dosage is 3-to 50% by total weight of the finished composition. The average particle size is 200 nanometers and range in size from about 50nm to 500 nm. Silane surface treated Sunsppheres 200 Nm are available upon request. New innovative dispersion technology for this product is available upon request.



PHYSICAL & CHEMICAL PROPERTIES:

Refractive Index	1.46 (N _D)
Softening Temperature	>1000 ⁰ C
Strain Point	>600 ⁰ C
Coefficient of Thermal Expansion	55 x 10 ⁻⁷ / ⁰ C
DC Resistivity	1 x 10 ⁸
Hardness (Mohs) Scale	> 8.0
BET Surface Area (sq.m/g)	23.52
Ph	4.60
Oil Absorption	25
Moisture	0.07%
Crushing Strength	>60,000 psi
Appearance	Fine White Powder
X-Ray Form	Amorphous
SiO ₂	99.99%
Na ₂ O	2 ppm
K ₂ O	2 ppm

Sunsppheres 200 Nm.

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See reverse side for additional information

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