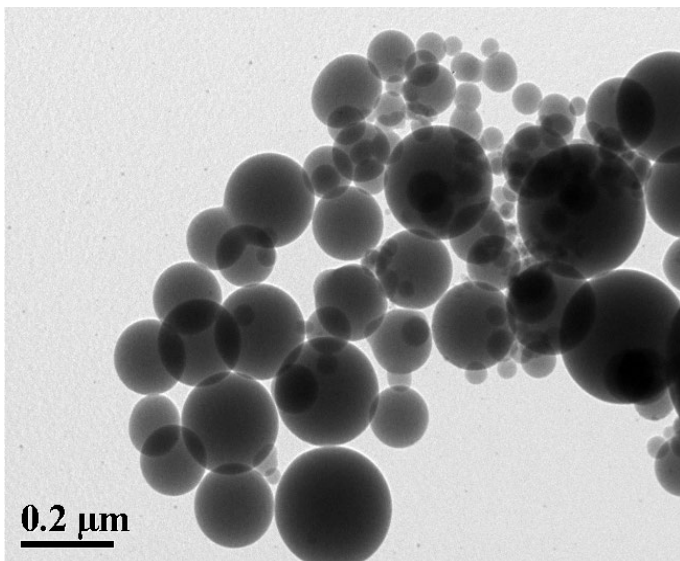


# SUNSPHERES™ 200 Nm ST – 3 (Surface Treated\*)

The Sunospheres™ 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 Sunospheres™ 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 Sunospheres™ 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 Sunospheres™ 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.



## PHYSICAL & CHEMICAL PROPERTIES:

Refractive Index	1.46 (N <sub>d</sub> )
Softening Temperature	>1000° C
Strain Point	>600° C
Coefficient of Thermal Expansion	0.48 x 10 <sup>-6</sup> /K
DC Resistivity	1 x 10 <sup>8</sup>
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
SiO <sub>2</sub>	99.99%
Na <sub>2</sub> O	2 ppm
K <sub>2</sub> O	2 ppm

Sunospheres™ 200 Nm.

THE MARK SUNSPHERES™ IS A PROPRIETARY TRADEMARK OF SUNCOLOR CORPORATION. LIGHT TRANSMISSION TECHNOLOGY IS THE SUBJECT OF US & INTERNATIONAL PATENTS PENDING AND COVERED UNDER US PATENT NO. 6,350,792 & NO. 6,660,374. THE INFORMATION PRESENTED IS TO THE BEST OF OUR KNOWLEDGE TRUE AND CORRECT. ALL SUGGESTIONS AND RECOMMENDATIONS ARE WITHOUT WARRANTY AND GUARANTEE AS THE CONDITIONS OF USE ARE BEYOND OUR CONTROL. WE DISCLAIM ANY LIABILITY INCURRED IN CONNECTION WITH THE USE OF THIS DATA. REVISED JANUARY 2021.

See reverse side for additional information



**NORTH CANTON, OHIO 44720  
TELEPHONE: 330.499.7010**

**FOR SAMPLES & CUSTOMER SERVICE, CONTACT MARY ZINK  
TEL: 330.327.2997 or [mzink@suncolorcorp.com](mailto:mzink@suncolorcorp.com)**

All information, including all data presented in the tables above entitled Typical Particle Size Analysis\* and Physical and Chemical Properties\*, recommendations, or advice contained in this document and related product data sheets given by Suncolor Corporation whether written or oral is given in good faith, to the best of its knowledge at the time of publication. The products of Suncolor Corporation are sold subject to Conditions of Sale. Nothing in this or any other document shall alter, vary, supersede or operate to waive any of the Conditions of Sale. Each user of the products shall convince himself, through all available sources (including finished product testing in its appropriate environment) of the suitability of the products supplied for its own particular purpose. Because actual use of the products by the user is outside the control of Suncolor Corporation, such use is within the exclusive responsibility of the user. Suncolor Corporation cannot be held responsible for any loss incurred through incorrect or faulty use of the products. Information, recommendations and/or advice are neither made to infringe on any patents, nor to grant a license under any patent or intellectual property right of Suncolor Corporation, nor to grant the right to file for any patent protection.