

# SUNCOLOR CORPORATION

ADDITIVES FOR COATINGS, INKS, ADHESIVES & THERMOPLASTICS

## SUNSPHERES™ 32.0

### DESCRIPTION

SUNSPHERES 32.0 are (transparent) solid microspheres that have the appearance of a fine white powder. SUNSPHERES are specially engineered fused (amorphous) glass microspheres that are resistant to temperatures greater than 900 degrees C and chemically stable in a vast range of resins and pH. When dispersed in radiation curable coating formulations, these spheres allow pigmented and/or thick, clear coatings to be cured readily with ultraviolet radiation. Cured coatings may have enhanced physical and mechanical properties including increased corrosion resistance, reduced shrinkage, improved adhesion to many substrates, greater impact resistance, and improved surface qualities such as mar and scratch resistance.

### UV TRANSMISSION

SUNSPHERES 32.0 transmit more than 85% of UV light having a wavelength of 200 nanometers and transmit more than 95% of UV light having a wavelength of greater than 300 nanometers.

### SIZING & USE:

SUNSPHERES 32.0 have a median particle size of approximately 32.0 microns, with 95% of particles passing 65 microns. Recommended dosages are 10 to 25% by weight of total coating formulation. SUNSPHERES 32.0 are designed for use in thick coatings of 3 to 50 mils.

TYPICAL PARTICLE SIZE ANALYSIS:			PHYSICAL & CHEMICAL PROPERTIES:	
By MicroTrac/ Median Diameter Approx. 32.0Microns				
(Microns) 65	(% Passing)	95	Index of Refraction	1.458(n <sub>D</sub> )
45		71	Softening Temperature	>1000 <sup>0</sup> C
22		35	Strain Point	>600 <sup>0</sup> C
11		14	Coefficient of Thermal Expansion	55 x 10 <sup>-7</sup> / <sup>0</sup> C
5.5		6	DC Resistivity	1 x 10 <sup>8</sup>
2.75		3.5	Hardness (Mohs) Scale	7.0
10% Finer		8.5	BET Surface Area (sq.m/g)	0.3
50% Finer		31	Ph	5-6
95% Finer		65	Structure/Amorphous SiO <sub>2</sub>	>99%
Shape: Spherical to Semi-Spherical/Solid Microspheres			Crushing Strength	>60,000 psi

## SUNCOLOR CORPORATION

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