

# SUNSPHERES<sup>™</sup> 32.0

#### **DESCRIPTION**

SUNSPHERES 32.0 are optically clear, solid fused amorphous silica microspheres specially engineered for paints, liquid and powder coatings, inks, adhesives, thermoplastics and composites. These microspheres increase impact resistance, reduce shrinkage, improve adhesion, and enhance surface qualities such as mar and scratch resistance. The ceramic nature of the product makes composites hard and durable.

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. SUNSPHERES 32.0 are inert to most substances, including virtually all acids, allowing their use in arduous and hostile environments.

#### **LIGHT TRANSMISSION**

The Sunspheres 32.0 efficiently transmit ultraviolet and visible light from 200 nanometers through the visible spectrum. These microspheres space pigments and promote efficient, thorough curing by ultraviolet radiation.

#### **SIZING & USE**

SUNSPHERES 32.0 have a median particle size of 32 microns with 95% of particles passing 65 microns. Recommended dosages range from 3 to 50% by total weight of formulation. SUNSPHERES 32.0 are designed for use in thick coatings appropriate to their size. The SUNSPHERES 32.0 provide texture in thinner coatings. Due to their low surface area, Sunspheres 32.0 are easily dispersed.

TYPICAL PARTICLE SIZE ANALYSIS*:  Median Diameter Approx. 32.0 Microns			PHYSICAL & CHEMICAL PROPERTIES*:	
	Microns 65 45 22 11 5.5 2.75 10% Finer 50% Finer	% Passing 95 71 35 14 6 3.5 8.5 31 65	Index of Refraction Softening Temperature Strain Point Coefficient of Thermal Expansion DC Resistivity Hardness (Mohs) Scale BET Surface Area (sq.m/g) pH Structure/Amorphous SiO2 Crushing Strength	1.458(n <sub>b</sub> ) >1000°C >600°C 55 x 10 <sup>-7</sup> /°( 1 x 10 <sup>8</sup> 7.0 0.3 5-6 >99% >60,000 ps
Shape: Solid, Spherical to Semi-S	oherical Microsp	oheres		

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See reverse side for additional information.



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