



PRODUCT DATA SHEET

P2050SL

SODA LIME GLASS MICROSPHERES

PHYSICAL DATA

Component Materials	SiO ² , CaO ¹ , MgO, Na ² O, K ² O, Al ² O ³
Specific Gravity	2.48
Index of Refraction	1.51
Diameter	Mean—30 to 45 microns; maximum—90 to 100 microns.
Appearance	Individual spheres are clear and transparent; in bulk, look like white powder.
Hardness	Moh >6, 30,000 psi crush point
CAS#	308076-03-1
Oil Absorption	18 to 20 grams oil/100 grams spheres

PRODUCT DESCRIPTION

P2050SL are clear, solid glass microspheres with an average mean diameter in the range of 30 to 45 microns and a top size of 100 microns. In bulk, they appear to be a white powder. Under a microscope, each individual micro particle can be seen to be a transparent sphere. These spheres are made from soda lime glass and have a refractive index of 1.51, a specific gravity of 2.48, Moh hardness higher than steel, a crush point of 30,000 psi and a degree of roundness in excess of 85%. The P2050SL spheres have a broader distribution curve than other Prizmalite microspheres and are designed to be a “work horse” product for primarily industrial applications.

APPLICATION BENEFITS

The P2050SL sphere is a functional enhancement pigment. Visually, it serves as a lens magnifier, an optical spacer and an efficient pigment extender. Geometrically, P2050SL spheres function as flow enabling and anti-mottling rheology modifiers. When combined with micronized rubber particles, the resulting coating affords cost-effective slip resistance on flooring materials and enhanced tactile grip for hand tools and other manual equipment.

FORMULATION GUIDANCE

P2050SL spheres can be added to solvent or water-based formulations. The ratio added depends on the application. As a functional enhancement additive, typical levels range from 7% to 12% calculated on a dry weight basis. When combined with micronized rubber particles in a coating to promote slip resistance and enhanced “grip”, the ratio of P2050SL spheres added depends on the size of the micronized rubber particles and the degree of resistance or grip desired.

NOTE: All glass microspheres attract water. Please keep this product dry. If clumping is observed, simply dry in an oven at 100°C for a half hour to remove water.