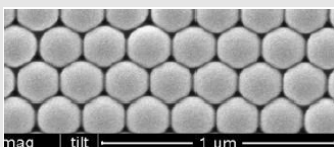


Product Information

Product Name	Cat. No.	Package Size
Fluorescent Microsphere	SG9112	15mL 50mL

Fluorescent Microsphere

Product No.	SG9112		
Constituent	Polystyrene		
Excitation Wavelength	Optical Property of Fluorescent Microsphere		
	Color	Excitation wavelength(nm)	Emission Wavelength(nm)
Emission Wavelength	Green Fluorescence	468(blue)	508(green)
	Red Fluorescence	542(green)	612(red)
Stokes shift	Rare Earth Fluorescence	Ultraviolet excitation	650
			300
Surface Functional Group	Carboxylate-modified, aldehyde-modified, epoxy-modified, chloromethyl-modified		
Density of Surface Functional Group	The amount of surface functional groups varies from 60 μ mol/g~70 μ mol/g. Since surface functional group amount is proportional to specific surface area, hydrophilic hydroxyl groups are introduced on surface for stability. Density of surface functional groups can be customized upon requirement between 40 μ mol/g to 120 μ mol/g.		
Monodispersity	Percentage of C.V ranges between 3%-8%.		
Grain Diameter	120nm, 160nm, 200nm, 400nm, 800nm Series. Custom preparation of grain size is available between 20nm-8000nm.		
Bead Density	1.05g/cm ³		
Solid Content	5%		
Package	15mL, 50mL		
Buffer Additive	Limited preservatives, sodium azide and trace surfactant		
Stock Condition	Store at room temperature or 2-8 $^{\circ}$ C in seal and protect from freezing		
Shelf life	\geq 24 months		
Introduction	<p>Colored latex microsphere is 20 nm-8000 nm diameter polystyrene bead. Grain size of latex bead can be changed according to customer's requirement. C.V (coefficient of variance) is constantly maintained between 3% and 8% to keep stable monodispersity. Batch yield is up to 1000 mL with 5% solid content. Custom preparation is available according to customer's need, which guarantees product stability between batches. Under the certain incident light, microspheres irradiate luminous emission. Thousands of efficient fluorescent molecules are evenly dispersed in interior of beads. Accordingly, each microsphere possesses as thousand times of fluorescence as single fluorescent molecule. Since fluorescent molecules are protected from oxidation and signal attenuation is impaired, fluorescent signals sustain strong, efficient and stable. This product can be stored in room temperature due to functional stability. The fluorescence is protected from attenuation when particles disperse in aqueous phase or air.</p>		
			

Picture of Monodispersity and Grain Size under Electron Microscope