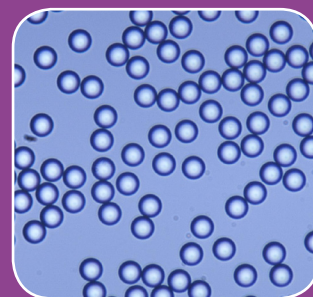




**Polybead[®]
Microspheres**



Polybead® Microspheres

Polybead® Microspheres are monodisperse polystyrene microspheres, supplied in sizes with nominal diameters from 50nm to 90µm. Diameters 10µm and larger are crosslinked with divinylbenzene (DVB). To provide precise monodisperse particle size distributions. These particles contain a slight anionic charge from sulfate ester.

Particles used in diagnostic assays (sizes from 0.75µm to 2.00µm) can be prepared without surfactant. All other sizes have minimal surfactant in the final preparation. Polybead® Microspheres are ideally suited for protein binding using passive adsorption techniques.



Coefficient of Variance	Coefficient of Variance
0.05µm <15%	4.50µm <7%
0.10µm <15%	6.00µm <10%
0.20µm <8%	10.0µm* <10%
0.35µm <5%	15.0µm* <10%
0.50µm <3%	20.0µm* <10%
0.75µm <3%	25.0µm* <10%
1.00µm <3%	45.0µm* <10%
1.50µm <5%	75.0µm* <10%
2.00µm <5%	90.0µm* <10%
3.00µm <5%	

*Crosslinked with divinylbenzene (DVB).

Microspheres, Dry Form

Our freeze-drying technique reduces the aggregation usually associated with dried beads. Dry material allows for the buffer of choice to be easily added.

Size: 1.00µm, 1.50µm, 3.00µm

Packaging: 500 mg volume

Polybead® Sampler Kits

Sampler Kit I

Kit contains 5ml of standard monodisperse polystyrene microspheres (2.5% solids [w/v] in water) for each of these nominal sizes: 0.5µm, 0.75µm, 1.0µm, 2.0µm, 3.0µm.

Sampler Kit II

Kit contains a hollow fiber filter-based separation device for washing and handling small particles, plus 5ml of standard monodisperse polystyrene microspheres (2.5% solids [w/v] in water) for each of these nominal sizes: 0.1µm, 0.2µm, 0.5µm, 1.0µm.

Sampler Kit III

Kit contains 1 ml of standard monodisperse polystyrene microspheres (2.5% solids [w/v] in water) for each of these nominal sizes: 0.05µm, 0.2µm, 0.5µm, 1.0µm, 45.0µm, 90.0µm.



Polybead® Functionalized Microspheres

Amino Microspheres

Monodisperse polystyrene microspheres that contain surface primary amine groups. Protein coupling using glutaraldehyde as a coupling agent will result in protein binding 11-12 carbon atoms from the surface of the bead. Packaged as 2.5% solids (w/v) aqueous suspensions. **Packaging:** 2 ml & 5ml volumes

Coefficient of Variance		Coefficient of Variance	
0.10µm.	<25%	1.00µm.	<6%
0.20µm.	<20%	3.00µm.	<5%
0.50µm.	<11%	6.00µm.	<10%
0.75µm.	<3%		

Carboxylate Microspheres

Monodisperse polystyrene microspheres that contain surface carboxyl groups. This allows for covalent binding of proteins to the bead surface. Packaged as 2.5% solids (w/v) aqueous suspensions. **Packaging:** 2 ml, 5ml, 10ml & 15 ml volumes

Coefficient of Variance		Coefficient of Variance	
0.05µm.	<15%	1.00µm.	<3%
0.10µm.	<15%	2.00µm.	<5%
0.20µm.	<8%	3.00µm.	<5%
0.35µm.	<5%	4.50µm.	<7%
0.50µm.	<3%	6.00µm.	<10%
0.75µm.	<3%	10.0µm.	<15%
		20.0µm.	<10%

Carboxy-Sulfate Microspheres

Monodisperse, surfactant-free polystyrene microspheres. We manufacture these particles to have sulfate charge groups in addition to carboxyl groups. 1.00µm for covalent binding of proteins to the bead surface. Packaged as 2.5% solids (w/v) aqueous suspensions.

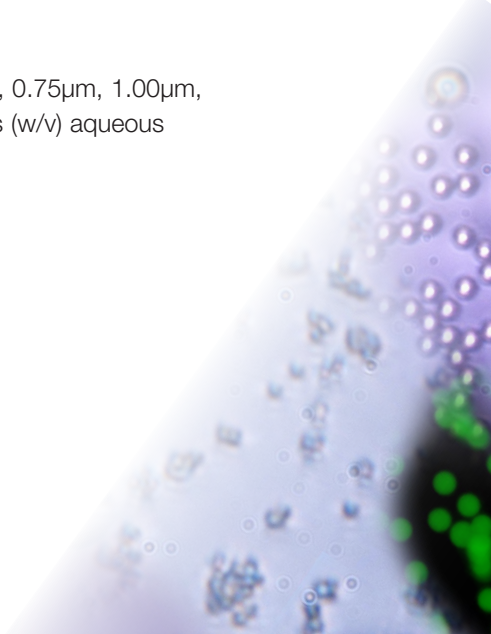
Packaging: 15 ml volume **Size:** 1.00µm

Sulfate Microspheres

Monodisperse polystyrene microspheres that offer a higher level of surface sulfate groups than our standard polystyrene microspheres. 0.20µm, 0.50µm, 1.00µm, 2.00µm. for covalent binding of proteins to the bead surface. Packaged as 2.5% solids (w/v) aqueous suspensions. **Packaging:** 10 & 15 ml volumes. **Size Range:** 0.20µm-2.00µm

Hydroxylate Microspheres

Monodisperse polystyrene microspheres that contain surface hydroxyl groups. 0.20µm, 0.50µm, 0.75µm, 1.00µm, 2.00µm, 3.00µm. for covalent binding of proteins to the bead surface. Packaged as 2.5% solids (w/v) aqueous suspensions. **Packaging:** 5, 10 & 15 ml volumes. **Size Range:** 0.20µm-3.00µm



Polybead® Dyed Microspheres

Polysciences is the leading supplier of visibly dyed polystyrene microspheres to the latex diagnostic marketplace. Diagnostic manufacturers rely on our precisely controlled particle synthesis to ensure reproducibility in both assay design and performance. Polybead Microspheres are packaged as 2.5% solids (w/v) aqueous suspensions and are available in a variety of nominal mean diameters and colors.

Blue Dyed Microspheres*

Size: 0.20µm - 10.0µm

Packaging: 2ml, 5ml & 15ml

Red Dyed Microspheres

Size: 0.20µm - 6.00µm

Packaging: 5ml & 15ml

Violet Dyed Microspheres

Size: 0.50µm - 10.0µm

Packaging: 2ml, 5ml & 15ml

Yellow Dyed Microspheres

Size: 0.20µm - 10.0µm

Packaging: 2ml, 5ml & 15ml

Black Dyed Microspheres

Size: 0.20µm - 10.0µm

Packaging: 2ml, 5ml & 15ml

Polybead® Dyed Microsphere Kits

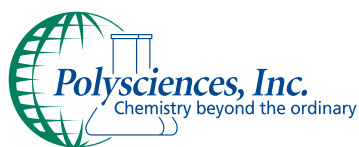
Blue Dyed Microsphere Sampler Kit

Kit contains 5ml of blue dyed monodisperse polystyrene microspheres (2.5% solids [w/v] in water) for each of these nominal sizes: 0.2µm, 0.5µm, 1.0µm, 3.0µm.

Dyed Microsphere Sampler Kit I

Kit contains 1ml of dyed 1.0µm monodisperse polystyrene microspheres (2.5% solids [w/v] in water) for each of these colors: red, blue, yellow, violet and unlabeled.

*Blue Dyed Microspheres also have amine groups and can be used for covalent coupling procedures using glutaraldehyde. See Technical Data Sheet #238G



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Polybead® Dyed Microsphere Kits (continued)

Polybead® Dyed Microsphere Sampler Kit II

Kit contains 1ml of dyed and fluorescent 1.0µm monodisperse polystyrene microspheres (2.5% solids [w/v] in water) for each of these colors: red, blue, yellow, violet and Fluoresbrite® YG, BB, YO, PC Red and unlabeled.

Polybead® Carboxylate Dyed Microspheres

Carboxylate Green Dyed Microspheres

Size: 0.20µm & 1.00µm

Packaging: 15ml

Carboxylate Orange Dyed Microspheres

Size: 0.20µm & 1.00µm

Packaging: 15ml

Carboxylate Blue Dyed Microspheres*

Size: 0.30µm - 6.00µm

Packaging: 5ml & 15ml

Carboxylate Red Dyed Microspheres

Size: 0.30µm - 6.00µm

Packaging: 5ml & 15ml

Carboxylate Yellow Dyed Microspheres

Size: 0.50µm - 6.00µm

Packaging: 5ml & 15ml

Sound interesting?

For more detailed information on

Polybead® Microspheres, go to:

www.polysciences.com/polybead

or call 1(800) 523-2575

Polysciences, Inc. is a world leader in the development of particle-based solutions for diagnostics, bioprocessing and instrument standardization. We are your source for organic, inorganic, biodegradable, magnetic, fluorescent, dyed and specific antibody and general protein coated particles. Our particle diameters span the range of 40nm to ~10µm. We stand behind our products. Regardless of the size of your question or the size of your company, we offer tech support, absolutely free.

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