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TECHNICAL DATA SHEET 1002

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Functionalized Polybead® and Fluoresbrite® Microspheres

DESCRIPTION

Polybead® and Fluoresbrite® functionalized polystyrene microspheres are

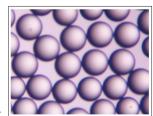
available with nominal diameters ranging from 50nm to 20µm. Diameters ≥4.5µm are crosslinked with divinylbenzene (DVB), and our synthesis methods result in monodisperse particle size distributions. In addition to the noted functional group, all functionalized polystyrene microspheres also have residual surface sulfate ester groups (negatively-charged) leftover from synthesis with sulfatebased surfactants and initiators.



Fluoresbrite® Microspheres

Most of our Polybead® and Fluoresbrite® functionalized microspheres are

packaged in an economical 2.5% solids (w / v) aqueous suspension with minimal surfactant in the final preparation.
Carboxylate- and amine-modified beads are ideally suited for the covalent attachment of proteins, antibodies, peptides, oligonucleotides, and other amine-terminated biomolecules via EDAC-or glutaraldehyde-mediated chemistries, respectively (see *Related Technical Data Sheets* listing).



Polybead® Microspheres

We also offer a number of sampler kits featuring multiple Polybead® or Fluoresbrite® functionalized microspheres for those investigators who are new to microspheres or who simply prefer the convenience of a kit.

CHARACTERISTICS

Functional Group:

Carboxylate; Amine; Carboxy-Sulfate;
Hydroxylate; Sulfate

Mean Diameter:

50nm - 20µm; see catalog or website for diameters available for each functional group

Particle Concentration:

2.5% solids (w/v), ~25mg/ml

Coefficient of Variation: 3 – 25%; see catalog or website for specification by catalog number

RELATED TECHNICAL DATA SHEETS

 TDS 238 - Polystyrene Microspheres: Frequently Asked Questions
 TDS 238C - Covalent Coupling of Proteins to Carboxylated Polystyrene Microparticles by the "Carbodiimide" Method

TDS 238D - Covalent Coupling of Proteins to Amino and Blue Dyed Polystyrene Microparticles by the "Glutaraldehyde"

Method

. TDS 238G - Protocol for Glutaraldehyde Kit (for use with Amino and Blue Dyed Beads)

5. TDS 431 - Fluoresbrite® Microparticles

6. TDS 644 - PolyLink Protein Coupling Kit for COOH Microspheres

7. TDS 808 - Polybead® Dyed Microspheres

STORAGE AND STABILITY

Store at 4°C. Freezing may result in irreversible aggregation and loss of binding activity.

These products are for research use only and are not intended for use in humans or for *in vitro* diagnostic use.

ORDERING INFORMATION

Cat. #	Description	Size
16586	Polybead [®] Amino, 0.10μm	5ml
15699	Polybead [®] Amino, 0.20μm	5ml
07763	Polybead [®] Amino, 0.50μm	5ml
17144	Polybead [®] Amino, 0.75μm	5ml
17010	Polybead [®] Amino, 1.00μm	5ml
17145	Polybead® Amino, 3.00μm	5ml
19118	Polybead® Amino, 6.00μm	2ml
19820	Polybead® Amino Sampler Kit	1 kit
	(0.5µm, 0.75µm, 1.0µm, 3.0µm)	
19406	Polybead® Carboxy-Sulfate, 1.0µm	15ml
15913	Polybead® Carboxylate, 0.05μm	10ml
16688	Polybead® Carboxylate, 0.10µm	15ml
08216	Polybead® Carboxylate, 0.20µm	15ml
21753	Polybead® Carboxylate, 0.35µm	15ml
09836	Polybead® Carboxylate, 0.50µm	15ml
07759	Polybead® Carboxylate, 0.75μm	15ml
08226	Polybead [®] Carboxylate, 1.00μm	15ml
18327	Polybead® Carboxylate, 2.00μm	10ml
09850	Polybead [®] Carboxylate, 3.00μm	5ml
17140	Polybead® Carboxylate, 4.50μm	5ml
17141	Polybead® Carboxylate, 6.00μm	5ml
18133	Polybead [®] Carboxylate, 10.0μm	2ml
24811	Polybead [®] Carboxylate, 20.0μm	2ml
19819	Polybead® Carboxylate Sampler Kit I	1 kit
	(0.5µm, 0.75µm, 1.0µm, 2.0µm, 3.0µm)	
21757	Polybead® Carboxylate Sampler Kit II (0.1μm, 0.2μm, 0.5μm, 1.0μm)	1 kit

ORDERING INFORMATION, cont.

ORDERING INFORMATION, cont.

Cat. #	Description	Size	Cat. #	Description	Size
15717	Polybead® Hydroxylate, 0.20µm	15ml	25488	Fluoresbrite® Europium (Eu) Carboxylate, 0.10µm	1ml, 5ml,10ml
07762	Polybead® Hydroxylate, 0.50µm	15ml	25489	Fluoresbrite® Europium (Eu) Carboxylate, 0.20µm	1ml, 5ml,10ml
19128	Polybead® Hydroxylate, 0.75µm	15ml	25490	Fluoresbrite® Europium (Eu) Carboxylate, 0.30µm	1ml, 5ml,10ml
17142	Polybead® Hydroxylate, 1.00μm	15ml			
19129	Polybead® Hydroxylate, 2.00µm	10ml	21118	Fluoresbrite® (273, 354) Carboxylate, 0.05µm	1ml
17143	Polybead® Hydroxylate, 3.00µm	5ml	21116	Fluoresbrite® (641, 662) Carboxylate, 0.05µm	1ml
			21117	Fluoresbrite® (763, 820) Carboxylate, 0.05µm	1ml
19402	Polybead® Sulfate, 0.20μm	15ml			
19403	Polybead® Sulfate, 0.50μm	15ml	17685	Fluoresbrite® (273, 354) Carboxylate, 1.75µm	1ml, 5ml
19404	Polybead® Sulfate, 1.00μm	15ml	17797	Fluoresbrite® (641, 662) Carboxylate, 1.75µm	1ml
19405	Polybead [®] Sulfate, 2.00μm	10ml			
			19839	Fluoresbrite® Carboxylate Color Range Kit II, 0.5µm	1 kit
19773	Fluoresbrite® BB Carboxylate, 0.05µm	10ml		(BB,YG, YO, Fluor. 273, Fluor. 641, Fluor. 763)	
19774	Fluoresbrite® BB Carboxylate, 0.10µm	10ml			
18339	Fluoresbrite® BB Carboxylate, 0.50µm	10ml	11975	Polybead® Carboxylate Blue Dyed, 0.30µm	15ml
17458	Fluoresbrite® BB Carboxylate, 1.00µm	10ml	19816	Polybead® Carboxylate Blue Dyed, 0.50μm	15ml
17686	Fluoresbrite® BB Carboxylate, 1.75µm	5ml	19120	Polybead® Carboxylate Blue Dyed, 1.00μm	15ml
18340	Fluoresbrite® BB Carboxylate, 4.50µm	5ml	19123	Polybead® Carboxylate Blue Dyed, 3.00µm	5ml
19102	Fluoresbrite® BB Carboxylate, 6.00µm	2ml	19126	Polybead® Carboxylate Blue Dyed, 6.00μm	5ml
19103	Fluoresbrite® BB Carboxylate, 10.0µm	2ml			
4000:	FI 1: @ VO 0 1 1: 0.57	40 1	13371	Polybead® Carboxylate Green Dyed, 0.20µm	15ml
16661	Fluoresbrite® YG Carboxylate, 0.05µm	10ml	13370	Polybead [®] Carboxylate Green Dyed, 1.00μm	15ml
16662	Fluoresbrite® YG Carboxylate, 0.10µm	10ml			45 1
09834	Fluoresbrite® YG Carboxylate, 0.20µm	10ml	13369	Polybead® Carboxylate Orange Dyed, 0.20µm	15ml
24051	Fluoresbrite® YG Carboxylate, 0.30µm	10ml	13368	Polybead® Carboxylate Orange Dyed, 1.00μm	15ml
24052	Fluoresbrite® YG Carboxylate, 0.35µm	10ml	0.4000		15
24053	Fluoresbrite® YG Carboxylate, 0.40µm	10ml	24063	Polybead® Carboxylate Red Dyed, 0.30µm	15ml
15700	Fluoresbrite® YG Carboxylate, 0.50µm Fluoresbrite® YG Carboxylate, 0.75µm	10ml	19815	Polybead® Carboxylate Red Dyed, 0.50µm	15ml 15ml
07766 15702	Fluoresbrite® YG Carboxylate, 0.75µm	10ml 10ml	19119 19122	Polybead® Carboxylate Red Dyed, 1.00µm	5ml
09719	Fluoresbrite® YG Carboxylate, 1.50µm	10ml	19125	Polybead® Carboxylate Red Dyed, 3.00µm Polybead® Carboxylate Red Dyed, 6.00µm	5ml
17687	Fluoresbrite® YG Carboxylate, 1.35µm	5ml	19125	Folybeau Garboxylate neu Dyeu, o.oopiii	JIIII
09847	Fluoresbrite® YG Carboxylate, 1.75µm Fluoresbrite® YG Carboxylate, 2.00µm	5ml	19817	Polybead® Carboxylate Yellow Dyed, 0.50µm	15ml
17147	Fluoresbrite® YG Carboxylate, 2.00µm	5ml	19121	Polybead® Carboxylate Yellow Dyed, 1.00µm	15ml
16592	Fluoresbrite® YG Carboxylate, 4.50µm	5ml	19124	Polybead® Carboxylate Yellow Dyed, 3.00µm	5ml
18141	Fluoresbrite® YG Carboxylate, 6.00µm	2ml	19127	Polybead® Carboxylate Yellow Dyed, 6.00µm	5ml
18142	Fluoresbrite® YG Carboxylate, 10.0µm	2ml	10127	Torybeda Odrboxylate Tellow Byea, σ.σομπ	01111
10112	Γα σαιδολγιατό, Γο.ομπι	21111	18602	Polybead® Acrylate, 1.00μm	15ml
21636	Fluoresbrite® YG Carboxylate Size Range Kit I	1 kit	.0002	,	
	(0.1µm, 0.2µm, 0.5µm, 0.75µm, 1.0µm)				
21637	Fluoresbrite® YG Carboxylate Size Range Kit II	1 kit			
	(1.75μm, 2.0μm, 3.0μm, 4.5μm, 6.0μm)				
19775	Fluoresbrite® YO Carboxylate, 0.05µm	10ml	TO	ORDER	
18791	Fluoresbrite® YO Carboxylate, 0.10µm	10ml	10 (JNUEN	
19391	Fluoresbrite® YO Carboxylate, 0.20µm	10ml		The U.S. Call: 1(800) 523-2575 • (215) 343-64	
18720	Fluoresbrite® YO Carboxylate, 0.50µm	10ml	In	The U.S. Fax: 1(800) 343-3291 • (215) 343-02	14
18449	Fluoresbrite® YO Carboxylate, 1.00µm	10ml	In	Germany Call: +(49) 06201-845200	
19392	Fluoresbrite® YO Carboxylate, 1.75µm	5ml		Germany Fax: +(49) 06201-8452020	
19393	Fluoresbrite® YO Carboxylate, 3.00µm	5ml			
19394	Fluoresbrite® YO Carboxylate, 4.50µm	5ml		Asia Call: (886) 2 8712 0600	
19395	Fluoresbrite® YO Carboxylate, 6.00µm	2ml	In	Asia Fax: (886) 2 8712 2677	
			Order online anytime at www.polysciences.com		

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