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# **TECHNICAL DATA SHEET 788**

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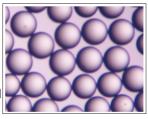
# **Polybead® Microspheres**

### DESCRIPTION

Polybead<sup>®</sup> polystyrene microspheres are supplied in sizes with nominal diameters from 50nm to 90µm. Our experienced chemists control the synthesis to provide precise monodisperse particle size distributions. These particles contain a slight anionic charge from sulfate ester. Diameters 4.5µm and larger are crosslinked with divinylbenzene (DVB).

Most of our Polybead® microspheres are packaged in an economical

2.5% solids (w/v) aqueous suspension with minimal surfactant in the final preparation. Non-functionalized Polybead<sup>®</sup> microspheres are ideally suited for protein binding using passive adsorption techniques, and functionalized versions are available for covalent binding. (See Related Technical Data Sheets listing.)



Polybead<sup>®</sup> microspheres are also available in a 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.

For those who are new to Polybead<sup>®</sup> microspheres or simply prefer the convenience of a kit, we offer three sampler kits to get you started.

## **CHARACTERISTICS**

Mean Diameter:	50nm - 90µm
Particle Concentration:	2.5% solids (w/v), ~25mg/ml; some diameters
	available dry.
Coefficient of Variation:	2–10% for most products; see catalog or
	website for specification by catalog number.

#### **RELATED TECHNICAL DATA SHEETS**

- 1. TDS 238 Polystyrene Microspheres: Frequently Asked Questions
- 2. TDS 238C Covalent Coupling of Proteins to Carboxylated Polystyrene Microparticles by the "Carbodiimide" Method
- 3. TDS 238D Covalent Coupling of Proteins to Amino and Blue Dyed Polystyrene Microparticles by the "Glutaraldehyde" Method
- 4. TDS 238E Protocol for Adsorbing Proteins on Polystyrene Microparticles
- 5. TDS 238G Protocol for Glutaraldehyde Kit (for use with Amino and Blue Dyed Beads)
- 6. TDS 431 Fluoresbrite® Microparticles
- 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.

Should any of our materials fail to perform to our specifications, we will be pleased to provide replacements or return the purchase price. We solicit your inquiries concerning all needs for life sciences work. The information given in this bulletin is to the best of our knowledge accurate, but no warranty is expressed or implied. It is the user's responsibility to determine the suitability for their own use of the products described herein, and since conditions of use are beyond our control, we disclaim all liability with respect to the use of any material supplied by us. Nothing contained herein shall be construed as a recommendation to use any product or to practice any process in violation of any law or any government regulation.

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#### **ORDERING INFORMATION**

UNDENING		
Cat. #	Description nominal diameter / mean diameter range	Size
08691-10	Polybead <sup>®</sup> Microspheres, <i>0.05µm / 0.036-0.064µm</i>	10ml
00876-15	Polybead® Microspheres, 0.10μm / 0.079-0.121μm	15ml
07304-15	Polybead <sup>®</sup> Microspheres,	15ml
07306-15	<i>0.20µm / 0.180-0.220µm</i> Polybead® Microspheres,	15ml
07307-15	<i>0.35µm / 0.315-0.385µm</i> Polybead® Microspheres,	15ml
07309-15	0.50µm / 0.450-0.550µm Polybead® Microspheres,	15ml
07310-15	0.75µm / 0.675-0.825µm Polybead® Microspheres,	15ml
17133-15	<i>1.00µm / 0.90-1.10µm</i> Polybead® Microspheres,	15ml
19814-15	<i>1.50µm / 1.35-1.65µm</i> Polybead® Microspheres,	15ml
17134-15	<i>2.00μm / 1.80-2.20μm</i> Polybead® Microspheres,	15ml
17135-5	<i>3.00μm / 3.00-3.30μm</i> Polybead® Microspheres,	5ml
07312-5	<i>4.50μm / 4.05-4.95μm</i> Polybead® Microspheres,	5ml
17136-5	<i>6.00μm / 5.40-6.60μm</i> Polybead® Microspheres,	5ml
18328-5	<i>10.0µm / 9.0-11.0µm</i> Polybead® Microspheres,	5ml
18329-5	<i>15.0µm / 13.5-16.5µm</i> Polybead® Microspheres,	5ml
07313-5	20.0μm / 18.0-22.0μm Polybead <sup>®</sup> Microspheres,	5ml
	25.0μm / 22.5-27.5μm	
07314-5	Polybead <sup>®</sup> Microspheres, 45.0µm / 40.5-49.5µm	5ml
24049-5	Polybead <sup>®</sup> Microspheres, 75.0μm / 67.5-82.5μm	5ml
07315-5	Polybead® Microspheres, 90.0μm / 81.0-99.0μm	5ml
19518-500	Polybead® Microspheres, Dry Form <i>1.00µm</i>	500mg
19519-500 19520-500	Polybead <sup>®</sup> Microspheres, Dry Form <i>1.50µm</i> Polybead <sup>®</sup> Microspheres, Dry Form <i>3.00µm</i>	500mg 500mg
19822-1	Polybead® Sampler Kit I	1 kit
21756-1	( <i>0.5µm, 0.75µm, 1.0µm, 2.0µm, 3.0µm</i> ) Polybead® Sampler Kit II	1 kit
16905-1	(0.1µm, 0.2µm, 0.5µm, 1.0µm) Polybead® Sampler Kit III (0.05чт, 0.3чт, 0.5чт, 1.0чт, 15.0чт,	1 kit
	(0.05µт, 0.2µт, 0.5µт, 1.0µт, 45.0µт, 90.0µт)	

## **TO ORDER**

In The U.S. Call:	1(800) 523-2575 • (215) 343-6484
In The U.S. Fax:	1(800) 343-3291 • (215) 343-0214
In Germany Call:	+(49) 06201-845200
In Germany Fax:	+(49) 06201-8452020
In Asia Call:	(886) 2 8712 0600
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