

# Dyed Microspheres

## Microspheres in a Rainbow of Colors



Visibly dyed microspheres are frequently used in lateral flow tests and "latex" agglutination tests. They are available in a range of intense colors that are suitable for visual or microscopic identification of positive test results.

We offer polystyrene-based microspheres that are impregnated with vibrant dyes for optimal visualization. Non-functionalized and functionalized versions are available to support adsorption and covalent binding strategies.

### DYEING METHOD

Microspheres are internally labeled with oil-soluble dyes. Our dyeing technique involves the swelling of polymeric microspheres in an organic solvent/dye solution. The water-insoluble dye diffuses into the polymer matrix and is entrapped when the solvent is removed from the microspheres. The resulting dyed microspheres remain stable in aqueous systems.

Internal labeling affords many benefits, including:

- availability of surface groups for coupling reactions;
- excellent stability;
- large selection of dyes;
- wide range of base bead sizes available, ~20nm-10µm, with other diameters available on a custom basis; and
- high dye loading.



### CUSTOM SERVICES

Our custom capabilities include color matching, custom color formulation, or use of the client's hydrophobic dye.

Our standard inventory includes non-functionalized dyed microspheres in black, blue, red, violet, and yellow, and carboxylated dyed microspheres available in blue, green, orange, red, and yellow. Dyed spheres may also be coated (e.g. streptavidin) on a custom basis.

For additional information regarding our dyed microspheres, visit our website at [www.polysciences.com](http://www.polysciences.com).

## Polybead® Dyed Microsphere Kits

Cat. #	Description
19821	Polybead® Blue Dyed Microsphere Sampler Kit (0.2µm, 0.5µm, 1.0µm, 3.0µm diameters)
16906	Polybead® Dyed Microsphere Kit I (1.0µm diameter spheres in red, blue, yellow, violet, and unlabeled)
18836	Polybead® Dyed Microsphere Kit II (1.0µm diameter spheres in red, blue, yellow, violet, Fluoresbrite® YG, BB, YO, PC Red, and unlabeled)

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## Polybead® Black Dyed Microspheres

Cat. #	Description
24290	Polybead® Black Dyed Microspheres, 0.2µm
24291	Polybead® Black Dyed Microspheres, 0.5µm
24287	Polybead® Black Dyed Microspheres, 1.0µm
24292	Polybead® Black Dyed Microspheres, 3.0µm
24293	Polybead® Black Dyed Microspheres, 6.0µm
24294	Polybead® Black Dyed Microspheres, 10.0µm

## Polybead® Blue Dyed Microspheres

Cat. #	Description
15706	Polybead® Blue Dyed Microspheres, 0.2µm
15709	Polybead® Blue Dyed Microspheres, 0.5µm
15712	Polybead® Blue Dyed Microspheres, 1.0µm
17138	Polybead® Blue Dyed Microspheres, 3.0µm
15715	Polybead® Blue Dyed Microspheres, 6.0µm
18138	Polybead® Blue Dyed Microspheres, 10.0µm

## Polybead® Red Dyed Microspheres

Cat. #	Description
15705	Polybead® Red Dyed Microspheres, 0.2µm
15708	Polybead® Red Dyed Microspheres, 0.5µm
15711	Polybead® Red Dyed Microspheres, 1.0µm
17137	Polybead® Red Dyed Microspheres, 3.0µm
15714	Polybead® Red Dyed Microspheres, 6.0µm

## Polybead® Violet Dyed Microspheres

Cat. #	Description
24064	Polybead® Violet Dyed Microspheres, 0.5µm
24065	Polybead® Violet Dyed Microspheres, 0.8µm
18134	Polybead® Violet Dyed Microspheres, 1.0µm
18135	Polybead® Violet Dyed Microspheres, 3.0µm
18136	Polybead® Violet Dyed Microspheres, 6.0µm
18139	Polybead® Violet Dyed Microspheres, 10.0µm

## Polybead® Yellow Dyed Microspheres

Cat. #	Description
15707	Polybead® Yellow Dyed Microspheres, 0.2µm
15710	Polybead® Yellow Dyed Microspheres, 0.5µm
15713	Polybead® Yellow Dyed Microspheres, 1.0µm
17139	Polybead® Yellow Dyed Microspheres, 3.0µm
15716	Polybead® Yellow Dyed Microspheres, 6.0µm
18337	Polybead® Yellow Dyed Microspheres, 10.0µm

## Polybead® Carboxylate Blue Dyed

Cat. #	Description
11975	Polybead® Carboxylate Blue Dyed, 0.3µm
19816	Polybead® Carboxylate Blue Dyed, 0.5µm
19120	Polybead® Carboxylate Blue Dyed, 1.0µm
19123	Polybead® Carboxylate Blue Dyed, 3.0µm
19126	Polybead® Carboxylate Blue Dyed, 6.0µm

## Polybead® Carboxylate Green Dyed

Cat. #	Description
13371	Polybead® Carboxylate Green Dyed, 0.2µm
13370	Polybead® Carboxylate Green Dyed, 1.0µm

## Polybead® Carboxylate Orange Dyed

Cat. #	Description
13369	Polybead® Carboxylate Orange Dyed, 0.2µm
13368	Polybead® Carboxylate Orange Dyed, 1.0µm

## Polybead® Carboxylate Red Dyed

Cat. #	Description
24063	Polybead® Carboxylate Red Dyed, 0.3µm
19815	Polybead® Carboxylate Red Dyed, 0.5µm
19119	Polybead® Carboxylate Red Dyed, 1.0µm
19122	Polybead® Carboxylate Red Dyed, 3.0µm
19125	Polybead® Carboxylate Red Dyed, 6.0µm

## Polybead® Carboxylate Yellow Dyed

Cat. #	Description
19817	Polybead® Carboxylate Yellow Dyed, 0.5µm
19121	Polybead® Carboxylate Yellow Dyed, 1.0µm
19124	Polybead® Carboxylate Yellow Dyed, 3.0µm
19127	Polybead® Carboxylate Yellow Dyed, 6.0µm

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