

# Fluorescent Polymer Microspheres



high fluorescence intensity

low variation of the fluorescence intensity

available in a wide range of sizes and dyes as aqueous suspensions and dry powders

dye leakage is prevented due to incorporation of the dye in the polymer matrix

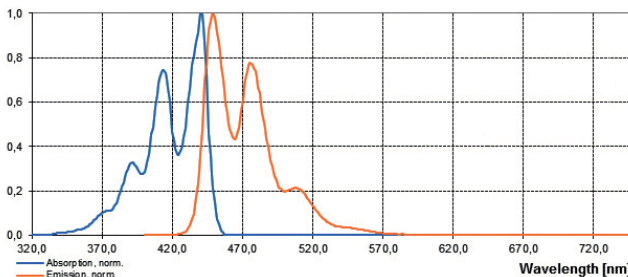
## Stable and bright fluorescent microspheres with adjustable colloidal and spectral properties

Fluorescent microspheres emit bright and distinctive colors when illuminated by the light of wavelengths shorter than the emission wavelength. This property improves their contrast and visibility relative to background materials. Besides the features of conventional microspheres, the fluorescent products offer improved sensitivity and detectability for analytical methods, yielding very low detection limits for both particle diameters and concentrations. This product line was developed for general laboratory use. It consists of a large assortment of particle sizes and different fluorescent colors. The dyes can be incorporated during the polymerization process, thereby preventing dye leakage. This unique technology ensures exceptionally small variation coefficients regarding the fluorescence signal. Dispersion in both aqueous media or air is possible without degrading their fluorescent properties. The products are very stable and can be stored at room temperature.

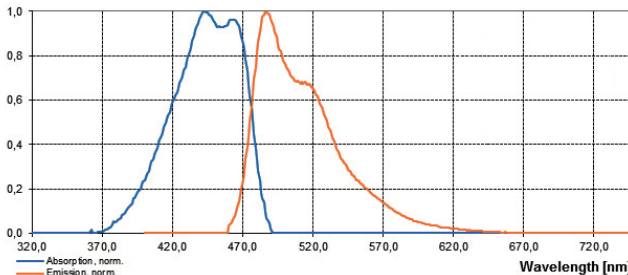
The fluorescent microspheres can be detected with a flow cytometer, epifluorescence microscope, confocal microscope, fluorescence spectrophotometer, amongst others. They can also be identified using a mineral light or black light and can be observed directly in the matrix or media being tested, or they can be collected on membrane filters for examination using the fluorescence microscope. If required, our scientists can modify the polymer microspheres matrix to tune stability in certain solvents. Such particles can be used to study kinetic processes. Targeted colloidal and spectral adjustments of the fluorescent microspheres can mimic complex biological components, such as bacteria, for analytical purpose.



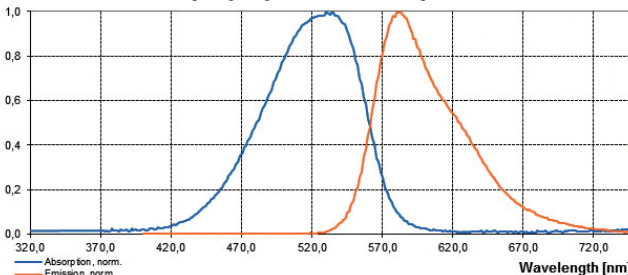
### Blue fluorescent polystyrene microspheres



### Green fluorescent polystyrene microspheres



### Red fluorescent polystyrene microspheres



#### Typical applications include:

- Flow cytometry instrument calibration and set-up
- Fluorescence microscopy
- Fluorescent instrument monitoring
- Confocal microscopy reference particles
- Filtration media and systems testing
- Vial and container cleaning studies
- Flow tracing and fluid mechanics
- Centrifugation and sedimentation studies

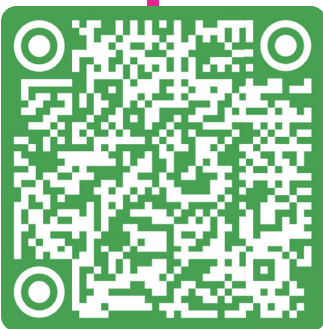
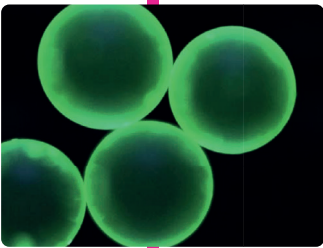
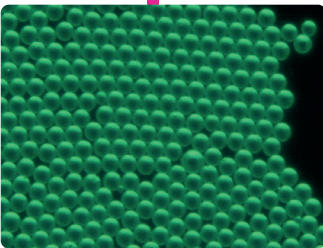
## Blue fluorescent polystyrene microspheres

1% solid, in aqueous suspension

PIN	Nominal Diameter	Volume
50100B-03	0,1 µm	3 mL
50100B-50	0,1 µm	50 mL
50500B-03	0,5 µm	3 mL
50500B-50	0,5 µm	50 mL
51010B-03	1 µm	3 mL
51010B-50	1 µm	50 mL
51050B-03	5 µm	3 mL
51050B-50	5 µm	50 mL
51100B-03	10 µm	3 mL
51100B-50	10 µm	50 mL
51150B-03	15 µm	3 mL
51150B-50	15 µm	50 mL
51200B-03	20 µm	3 mL
51200B-50	20 µm	50 mL

Dry powder

PIN	Nominal Diameter	Quantity
51050B-01	5 µm	1 gr
51100B-01	10 µm	1 gr
51150B-01	15 µm	1 gr
51200B-01	20 µm	1 gr



## Green fluorescent polystyrene microspheres

1% solid, in aqueous suspension

PIN	Nominal Diameter	Volume
50100G-03	0,1 µm	3 mL
50100G-50	0,1 µm	50 mL
50500G-03	0,5 µm	3 mL
50500G-50	0,5 µm	50 mL
51010G-03	1 µm	3 mL
51010G-50	1 µm	50 mL
51050G-03	5 µm	3 mL
51050G-50	5 µm	50 mL
51100G-03	10 µm	3 mL
51100G-50	10 µm	50 mL
51150G-03	15 µm	3 mL
51150G-50	15 µm	50 mL
51200G-03	20 µm	3 mL
51200G-50	20 µm	50 mL

Dry powder

PIN	Nominal Diameter	Quantity
51050G-01	5 µm	1 gr
51100G-01	10 µm	1 gr
51150G-01	15 µm	1 gr
51200G-01	20 µm	1 gr

## Red fluorescent polystyrene microspheres

1% solid, in aqueous suspension

PIN	Nominal Diameter	Volume
50100R-03	0,1 µm	3 mL
50100R-50	0,1 µm	50 mL
50500R-03	0,5 µm	3 mL
50500R-50	0,5 µm	50 mL
51010R-03	1 µm	3 mL
51010R-50	1 µm	50 mL
51050R-03	5 µm	3 mL
51050R-50	5 µm	50 mL
51100R-03	10 µm	3 mL
51100R-50	10 µm	50 mL
51150R-03	15 µm	3 mL
51150R-50	15 µm	50 mL
51200R-03	20 µm	3 mL
51200R-50	20 µm	50 mL

Dry powder

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