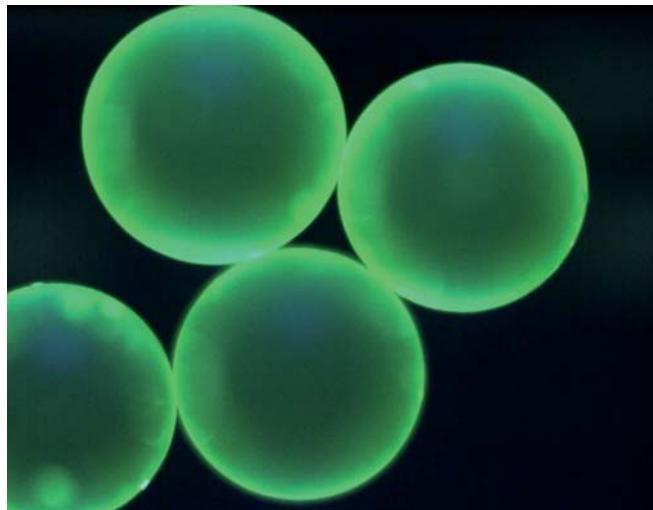


# Fluorescent Polystyrene Microspheres

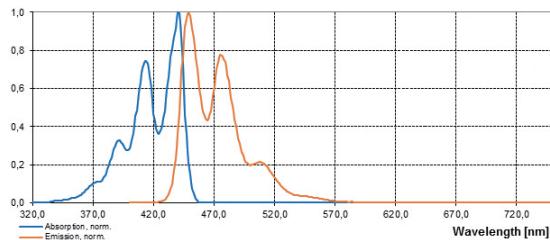
Fluorescent microspheres emit bright and distinctive colours when illuminated by light of shorter wavelengths than the emission wavelength. This property improves their contrast and visibility relative to background materials. In addition to the features of conventional microspheres, the fluorescent products offer improved sensitivity and detectability for analytical methods.

This product line was developed for general laboratory use. It consists of a large assortment of particle sizes and different fluorescent colours. The dyes are incorporated during the polymerisation process, which prevents dye leakage. This unique technology ensures exceptionally small fluorescence C.V.'s. Dispersion in both aqueous media or air are possible without degrading their fluorescent properties. The products are very stable. They can be stored at room temperature.

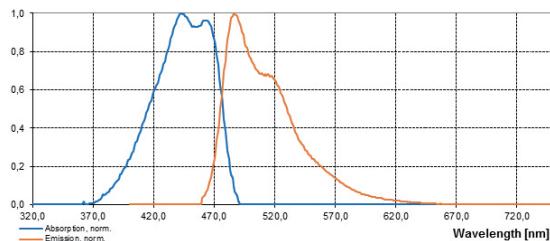


The fluorescent microspheres can be detected with a flow cytometer, epifluorescence microscope, confocal microscope, fluorescence spectrophotometer, amongst others. They can also be detected using a mineral light or black light and can be observed directly in the matrix or media being tested, or they can be collected on membrane filters for examination by microscope.

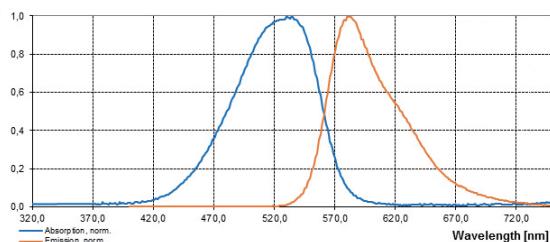
**Blue fluorescent polystyrene microspheres**



**Green fluorescent polystyrene microspheres**



**Red fluorescent polystyrene microspheres**



In some cases, the polymer microspheres can be dissolved and the fluorescent dyes measured directly.

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-003	100 nm	3 mL
50100B-050	100 nm	50 mL
50200B-003	200 nm	3 mL
50200B-050	200 nm	50 mL
50500B-003	500 nm	3 mL
50500B-050	500 nm	50 mL
51010B-003	1 µm	3 mL
51010B-050	1 µm	50 mL
51050B-003	5 µm	3 mL
51050B-050	5 µm	50 mL

#### Dry powder

PIN	Nominal diameter	Quantity*
51050B-01	5 µm	1 gr
51050B-05	5 µm	5 gr
51070B-01	7 µm	1 gr
51070B-05	7 µm	5 gr
51100B-01	10 µm	1 gr
51100B-05	10 µm	5 gr
51150B-01	15 µm	1 gr
51150B-05	15 µm	5 gr
51200B-01	20 µm	1 gr
51200B-05	20 µm	5 gr

### **Green fluorescent polystyrene microspheres**

1% solid, in aqueous suspension

PIN	Nominal diameter	Volume*
50100G-003	100 nm	3 mL
50100G-050	100 nm	50 mL
50200G-003	200 nm	3 mL
50200G-050	200 nm	50 mL
50500G-003	500 nm	3 mL
50500G-050	500 nm	50 mL
51010G-003	1 µm	3 mL
51010G-050	1 µm	50 mL
51050G-003	5 µm	3 mL
51050G-050	5 µm	50 mL

#### Dry powder

PIN	Nominal diameter	Quantity*
51050G-01	5 µm	1 gr
51050G-05	5 µm	5 gr
51070G-01	7 µm	1 gr
51070G-05	7 µm	5 gr
51100G-01	10 µm	1 gr
51100G-05	10 µm	5 gr
51150G-01	15 µm	1 gr
51150G-05	15 µm	5 gr
51200G-01	20 µm	1 gr
51200G-05	20 µm	5 gr

### **Red fluorescent polystyrene microspheres**

1% solid, in aqueous suspension

PIN	Nominal diameter	Volume*
50100R-003	100 nm	3 mL
50100R-050	100 nm	50 mL
50200R-003	200 nm	3 mL
50200R-050	200 nm	50 mL
50500R-003	500 nm	3 mL
50500R-050	500 nm	50 mL
51010R-003	1 µm	3 mL
51010R-050	1 µm	50 mL
51050R-003	5 µm	3 mL
51050R-050	5 µm	50 mL

#### Dry powder

PIN	Nominal diameter	Quantity*
51050R-01	5 µm	1 gr
51050R-05	5 µm	5 gr
51070R-01	7 µm	1 gr
51070R-05	7 µm	5 gr
51100R-01	10 µm	1 gr
51100R-05	10 µm	5 gr
51150R-01	15 µm	1 gr
51150R-05	15 µm	5 gr
51200R-01	20 µm	1 gr
51200R-05	20 µm	5 gr

\* other volumes or quantities and diameters on request.