



Orange PS Fluorescent Particles PRODUCT DATA SHEET

Orange PS Fluorescent Particles

Description

Polystyrene (PS) Fluorescent Particles are high-performance particles widely used in biomedical, environmental monitoring, materials science, and other fields. It is made of polystyrene substrate and can stably load fluorescent dyes, with good fluorescence properties. The size of this material is usually between nanometers and micrometers, with uniform morphology and good dispersion. PS Fluorescent Particles can emit bright fluorescent signals under UV or visible light irradiation, making them easy to use as markers in various analytical and detection applications. In the biomedical field, PS Fluorescent Particles can be used in cell labeling, immune detection, drug delivery, and diagnostic imaging technologies to help researchers track cells or molecules. The surface of PS Fluorescent Particles can be further functionalized to bind with specific antibodies or ligands, improving the specificity and sensitivity of detection. In addition, PS Fluorescent Particles are widely used in environmental monitoring and water quality analysis to detect the presence and concentration of pollutants. Due to its excellent stability, low toxicity, and good biocompatibility, PS Fluorescent Particles have gradually become an important tool in modern scientific research and industrial testing. Abvigen Inc can provide high-quality Orange PS Fluorescent Particles in various particle sizes. The product has uniform particle size and stable fluorescence performance. It can meet the personalized material needs of various customers for research and development, testing, production, and consumption.

For custom sizes, formulations or bulk quantities please contact our customer service department.

Website: www.abvigen.com **Phone:** +1 929-202-3014 **Email:** info@abvigenus.com



Characteristics

Concentration: 50 mg/ml

Size: 10 ml; 20 ml

Surface: N/A

Shape: Spherical

Density: 1.03 g/ccm

Composition: Orange PS Fluorescent Particles

Excitation: 540 nm

Emission: 580 nm

Buffer: DI Water

Form: Suspension

Store: Storage at 2 - 8 °C

Storage

This product should be stored at 4°C. **DO NOT FREEZE.**

For 50 mg/ml of Orange PS Fluorescent Particles

Diameter	Conc. mg/ml	Particles/mg	Particles/ml	Diameter	Conc. mg/ml	Particles/mg	Particles/ml
0.05 um	50	1.48E+13	7.42E+14	18 um	50	3.18E+05	1.59E+07
0.1 um	50	1.85E+12	9.27E+13	19 um	50	2.70E+05	1.35E+07
0.2 um	50	2.32E+11	1.16E+13	20 um	50	2.32E+05	1.16E+07
0.3 um	50	6.87E+10	3.43E+12	21 um	50	2.00E+05	1.00E+07
0.4 um	50	2.90E+10	1.45E+12	22 um	50	1.74E+05	8.71E+06
0.5 um	50	1.48E+10	7.42E+11	23 um	50	1.52E+05	7.62E+06
0.6 um	50	8.58E+09	4.29E+11	24 um	50	1.34E+05	6.71E+06
0.7 um	50	5.41E+09	2.70E+11	25 um	50	1.19E+05	5.93E+06
0.8 um	50	3.62E+09	1.81E+11	30 um	50	6.87E+04	3.43E+06
0.9 um	50	2.54E+09	1.27E+11	40 um	50	2.90E+04	1.45E+06
1 um	50	1.85E+09	9.27E+10	50 um	50	1.48E+04	7.42E+05
2 um	50	2.32E+08	1.16E+10	60 um	50	8.58E+03	4.29E+05
3 um	50	6.87E+07	3.43E+09	70 um	50	5.41E+03	2.70E+05



4 um	50	2.90E+07	1.45E+09	80 um	50	3.62E+03	1.81E+05
5 um	50	1.48E+07	7.42E+08	90 um	50	2.54E+03	1.27E+05
6 um	50	8.58E+06	4.29E+08	110 um	50	1.39E+03	6.97E+04
7 um	50	5.41E+06	2.70E+08	120 um	50	1.07E+03	5.37E+04
8 um	50	3.62E+06	1.81E+08	150 um	50	5.49E+02	2.75E+04
9 um	50	2.54E+06	1.27E+08	180 um	50	3.18E+02	1.59E+04
10 um	50	1.85E+06	9.27E+07	250 um	50	1.19E+02	5.93E+03
11 um	50	1.39E+06	6.97E+07	500 um	50	1.48E+01	7.42E+02
12 um	50	1.07E+06	5.37E+07	900 um	50	2.54E+00	1.27E+02
13 um	50	8.44E+05	4.22E+07	1100 um	50	1.39E+00	6.97E+01
14 um	50	6.76E+05	3.38E+07	1400 um	50	6.76E-01	3.38E+01
15 um	50	5.49E+05	2.75E+07	1700 um	50	3.77E-01	1.89E+01
16 um	50	4.53E+05	2.26E+07	3000 um	50	6.87E-02	3.43E+00
17 um	50	3.77E+05	1.89E+07				

Polystyrene Particles Centrifugation Parameters

Particle Size	Centrifugal Acceleration	Time	Resuspension of Pellet
50 nm	45,000 x g	30 min	30 min sonication / vortex
100 nm	45,000 x g	30 min	30 min sonication / vortex
200 nm	45,000 x g	30 min	30 min sonication / vortex
500 nm	45,000 x g	20 min	10 min sonication / vortex
800 nm	10,000 x g	20 min	10 min sonication / vortex
1 um	3,500 x g	15 min	10 min sonication / vortex
2-4 um	1,600 x g	15 min	vortex
5-8 um	1,200 x g	10 min	vortex
>8 um	25 x g	10 min	vortex

Advantage

Monodisperse particles

High uniformity of particle size

High fluorescence intensity

Good chemical stability

Strong resistance to photobleaching

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Ordering Information

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