



## PMMA Particles-Abvi Fluor555 PRODUCT DATA SHEET

### PMMA Particles-Abvi Fluor555

#### Description

Poly(methyl methacrylate) (PMMA) microsphere is a kind of spherical polymer particles, which is polymerized from methyl methacrylate (MMA) monomer by initiator. PMMA particles have monodisperse diameter, excellent biocompatibility, superior transparency and diverse chemical group, and widely used in templates, optoelectronic devices, detection and separation.

The preparation systems of PMMA microspheres including emulsion polymerization, suspension polymerization, dispersion polymerization, seed swelling polymerization, and the functionalization strategies. Abvigen can offer PMMA microspheres involving group modification, magnetic nanoparticle doping, fluorescent particles.

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

website: [www.abvigen.com](http://www.abvigen.com) Phone: +1 929-202-3014 Email: [info@abvigenus.com](mailto:info@abvigenus.com)

#### Characteristics

Concentration: 10 mg/ml

Size: 10 ml; 20 ml

Dye: Abvi Fluor555

Surface: Plain

Shape: Spherical

Density: 1.15 g/ccm

Composition: Poly(methyl methacrylate) particles

Buffer: DI Water

Form: Suspension

#### Storage

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

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## Highlights

Highly spherical, optically clear, and can be dissolved with solvents.

Hydrophilic, amorphous, transparent, and colorless thermoplastic

Excellent UV resistance

High compressibility

Optical dispersion

High impact and heat resistance

Good tensile and flexural strength

High compressive strength

Good dielectric strength

## Applications

Fillers in cosmetic procedures

Energy storage

Tissue engineering

Thin-film transistors

Bioimaging

Lightweight alternative

Porous ceramics

Theranostics

Pharmaceutical industries

Drug delivery systems

Bone cements

Biomedical devices

Immunoassay

Plastic material

Prosthetic dental applications

Sensor

Self assembled microfluidic devices

## For 10 mg/ml of 1% w/v particles

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Diameter	Conc. mg/ml	Particles/mg	Particles/ml	Diameter	Conc. mg/ml	Particles/mg	Particles/ml
50 nm	10	1.33E+13	1.33E+14	10 um	10	1.66E+06	1.66E+07
80 nm	10	3.24E+12	3.24E+13	20 um	10	2.08E+05	2.08E+06
100 nm	10	1.66E+12	1.66E+13	30 um	10	6.15E+04	6.15E+05
200 nm	10	2.08E+11	2.08E+12	40 um	10	2.59E+04	2.59E+05
300 nm	10	6.15E+10	6.15E+11	50 um	10	1.33E+04	1.33E+05
400 nm	10	2.59E+10	2.59E+11	60 um	10	7.69E+03	7.69E+04
500 nm	10	1.33E+10	1.33E+11	70 um	10	4.84E+03	4.84E+04
600 nm	10	7.69E+09	7.69E+10	80 um	10	3.24E+03	3.24E+04
700 nm	10	4.84E+09	4.84E+10	90 um	10	2.28E+03	2.28E+04
800 nm	10	3.24E+09	3.24E+10	100 um	10	1.66E+03	1.66E+04
900 nm	10	2.28E+09	2.28E+10	200 um	10	2.08E+02	2.08E+03
1 um	10	1.66E+09	1.66E+10	300 um	10	6.15E+01	6.15E+02
2 um	10	2.08E+08	2.08E+09	400 um	10	2.59E+01	2.59E+02
3 um	10	6.15E+07	6.15E+08	500 um	10	1.33E+01	1.33E+02
4 um	10	2.59E+07	2.59E+08	600 um	10	7.69E+00	7.69E+01
5 um	10	1.33E+07	1.33E+08	700 um	10	4.84E+00	4.84E+01
6 um	10	7.69E+06	7.69E+07	800 um	10	3.24E+00	3.24E+01
7 um	10	4.84E+06	4.84E+07	900 um	10	2.28E+00	2.28E+01
8 um	10	3.24E+06	3.24E+07	1 mm	10	1.66E+00	1.66E+01
9 um	10	2.28E+06	2.28E+07				

**Ordering Information**

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