MonoPMMA Microsphere

Description

Microsphere Composition:	Polymethylmethacrylate
Form :	Aqueous dispersion
Approximate Concentration (W/V):	5% solids
Sodium Azide Concentration :	50PPM
Surfactant :	<0.1% (W/V) or None

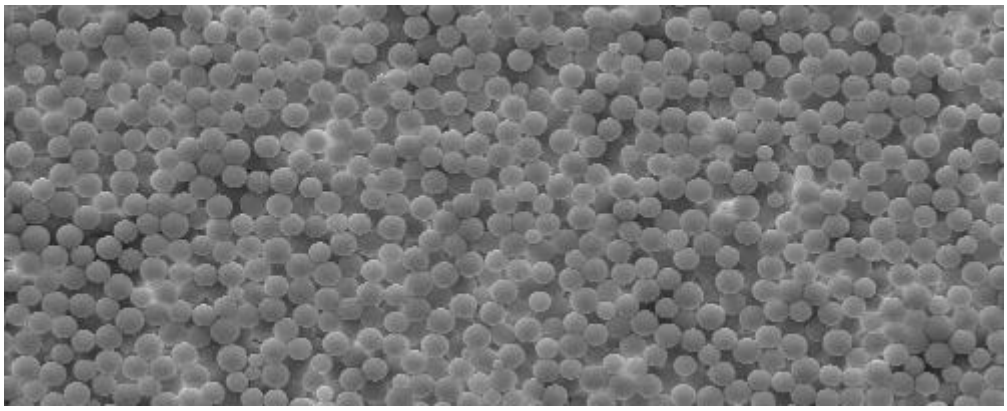
Physical Data

Nominal Diameter :	1μm, 2μm, 3μm
Density :	1.19 g/cm3
Refractive Index:	1.48 @ 589 nm, 25℃

Physical and Chemical Properties

Hydrophilic anionic surface; Unstable in strong acids and bases; Soluble in organic solvents like benzene, halogenated hydrocarbons, or acetone.

Example of SEM Image



2.5um PMMA Microsphere

Storage and Handling

Before sampling, manually shake and/or expose it to ultrasonics until the spheres are uniformly distributed. Then take a sample from the vial. Use filtered distilled water for dilution. When electrolytes are used for electrical sensing zone counter measurements, first dilute the sample

with water to prevent agglomeration.
The unit is stored at room temperature or refrigerated. The vial is sealed tightly. Once the cap has been removed, care should be taken to prevent contamination. Don’t remove dropper tip.

Features and Application

1. Excellent biocompatibility–many medical and biochemical applications;
2. High monodispersity–suitable for 2D and 3D particle assemblies and for investigations in the colloidal crystal field;
3. Reduced non-specific protein binding activity;
4. Optical Tweezer Manipulation;
5. Good mechanical stability;
6. Calibration standards of flow cytometers,particle and hematology analyzers,zeta-potential measuring instruments;
7. Used as particle standards as well as tracers in environmental science, flow visualization and measurements in gases and liquids like Laser Doppler Anemometry (LDA), Particle Dynamics Analysis (PDA), Particle Image Velocimetry (PIV), Digital Imaging Velocimetry (DIV) and Laser Speckle Velocimetry (LSV).