Monodisperse PS Spheres

Polystyrene spheres synthesized with exceptionally narrow size distributions.

Monodisperse latex spheres in various sizes (each with a density of 1.05 g/cm³), including average diameters of:

- 0.099 micrometers (Dow Diagnostic Products LS 1048-E)
- 0.170 micrometers (Dow Diagnostic Products LS 1101-A)
- 0.280 micrometers (Dow Diagnostic Products LS 1019-E)
- 0.310 micrometers (Dow Diagnostic Products LS 1121-B)
- 0.320 micrometers (Dow Diagnostic Products LS 1122-B)
- 0.330 micrometers (Dow Diagnostic Products LS 1131-B)

Select the desired sizes and quantities during the checkout process.

Samples have a typical polydispersity in diameter of 3% or less, as determined by scanning electron microscopy (Zeiss MERLIN), dynamic light scattering (LS Spectrometer) and holographic particle characterization (Spheryx xSight).
Particles are ready for use as shipped. Standard samples consist of aqueous 5 mL suspensions at 2% w/v particles, with 0.02% sodium azide added as an anti-microbial agent. Samples with custom volumes and solids contents are available upon request.

Particles with diameters smaller than 0.5 µm were prepared by conventional emulsion polymerization with a persulfate-ion free-radical initiator. Larger particles were prepared by seeded emulsion polymerization using smaller particles as seeds. Particles from these specific production runs have been featured prominently in numerous scientific and engineering publications, including:

Technology ID

PS Spheres

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Authors

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Andrew Hollingsworth, PhD

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