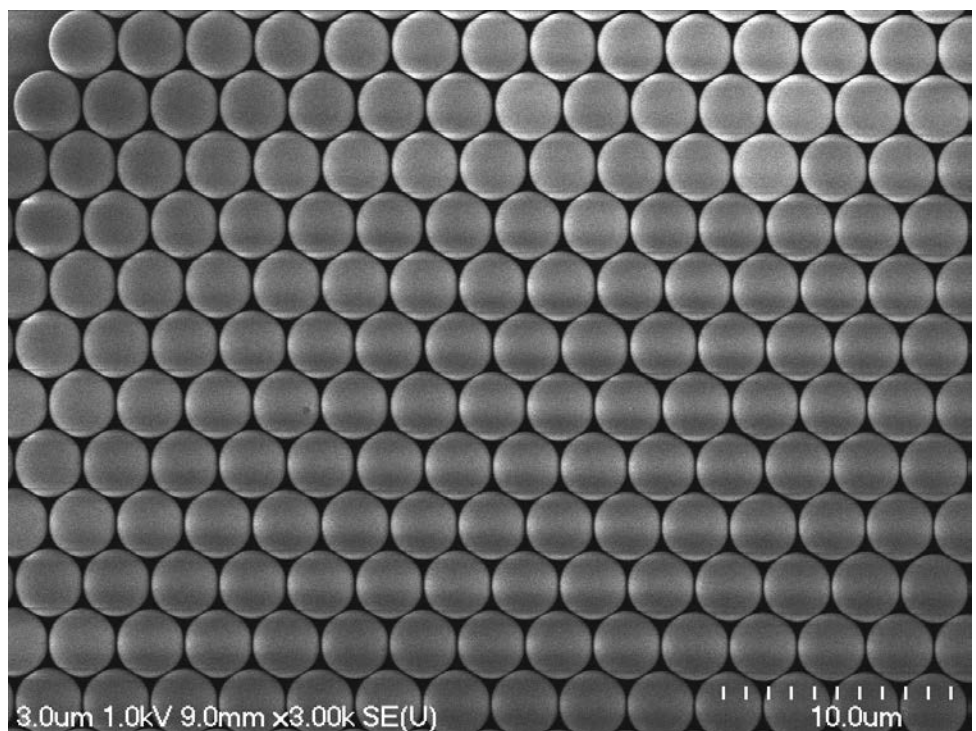


Particle Size Standard and Count Control™

The Applied Microspheres Particle Size Standard and Count Control™ product line is designed for calibration and validation of particle sizing and counting instruments. They are perfectly suited to be applied in liquid laser particle counters. The diameters range from 0,6 to 100 µm and are prepared in a specially formulated medium as low residue aqueous suspensions for minimal background interference. Applied Microspheres' special formulation ensures a long shelf life and allows for storage at room temperature. They are composed of polystyrene with a density of 1,05 g / cm³ and are packaged in 20 mL dropper-tipped vials. The refractive index is 1,59 @ 589 nm.



Concentration is adjusted for direct use or for easy dilutions in the range of 10⁴ to 10⁷ particles per ml. As a main feature the particle concentration is controlled extensively, based on representative quality control. That results in a benchmark count accuracy with a deviation of ± 10 % only.

The particle diameters are traceable to SI which includes NIST traceability. Calibration is done by electron or optical microscopy, by electrical sensing zone, single particle optical sizing, laser diffraction and analytical differential centrifugation, using reference materials calibrated by ISO/IEC 17025 certified standards and NIST Standard Reference Materials (SRM).

Product Identification number (PIN)	Nominal Size	Channel	Nominal Counts/mL
21600-20	0,6 µm	Counts/mL (≥ 0,5 µm)	1·10 ⁷ ± 10 %
21700-20	0,7 µm	Counts/mL (≥ 0,5 µm)	1·10 ⁷ ± 10 %
21800-20	0,8 µm	Counts/mL (≥ 0,5 µm)	1·10 ⁷ ± 10 %
22010-20	1 µm	Counts/mL (≥ 0,7 µm)	1·10 ⁷ ± 10 %
22020-20	2 µm	Counts/mL (≥ 1 µm)	1·10 ⁷ ± 10 %
22030-20	3 µm	Counts/mL (≥ 2 µm)	1·10 ⁷ ± 10 %
22040-20	4 µm	Counts/mL (≥ 2 µm)	1·10 ⁷ ± 10 %
22050-20	5 µm	Counts/mL (≥ 2 µm)	1·10 ⁷ ± 10 %
22060-20	6 µm	Counts/mL (≥ 4 µm)	1·10 ⁷ ± 10 %
22070-20	7 µm	Counts/mL (≥ 5 µm)	1·10 ⁷ ± 10 %
22080-20	8 µm	Counts/mL (≥ 6 µm)	1·10 ⁷ ± 10 %
22090-20	9 µm	Counts/mL (≥ 5 µm)	1·10 ⁷ ± 10 %
22100-20	10 µm	Counts/mL (≥ 5 µm)	1·10 ⁷ ± 10 %
22150-20	15 µm	Counts/mL (≥ 10 µm)	1·10 ⁶ ± 10 %
22200-20	20 µm	Counts/mL (≥ 10 µm)	1·10 ⁶ ± 10 %
22250-20	25 µm	Counts/mL (≥ 15 µm)	1·10 ⁶ ± 10 %
22300-20	30 µm	Counts/mL (≥ 20 µm)	1·10 ⁵ ± 10 %
22400-20	40 µm	Counts/mL (≥ 25 µm)	1·10 ⁵ ± 10 %
22500-20	50 µm	Counts/mL (≥ 25 µm)	1·10 ⁵ ± 10 %
22700-20	70 µm	Counts/mL (≥ 50 µm)	5·10 ⁴ ± 10 %
22800-20	80 µm	Counts/mL (≥ 50 µm)	5·10 ⁴ ± 10 %
22900-20	90 µm	Counts/mL (≥ 50 µm)	1·10 ⁴ ± 10 %
23010-20	100 µm	Counts/mL (≥ 50 µm)	1·10 ⁴ ± 10 %