

March 24, 2009

NIST TRACEABLE PARTICLE SIZE STANDARDS


CERTIFICATE OF TRACEABILITY


This certifies that NIST Standard Reference Materials 1690, 1692 and 1961 were used to validate the accuracy and traceability of the calibration methods used to transfer the calibrated mean diameter dimension of this product.

Catalog Code: NT21N, Lot Number: 8995, Particle Size Standards
Certified Mean Diameter: $4.17\mu\text{m}$
Uncertainty: $\pm 0.03\mu\text{m}$
Date of Certificate: March 24, 2009
Date of Expiration: March 24, 2010



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Void Without Seal



The most critical aspect of microparticle sizing is the use of microparticle size standards. National Institute of Standards and Technology (NIST) Traceable Particle Size Standards provide the accurate and traceable size calibration tools needed for particle size analysis. These standards are a series of particles with calibrated mean diameters from 40 nanometers (nm) to 175 micrometers (μm) traceable to NIST Standard Reference Material. It is the *mean diameter* which is certified and traceable to NIST, with further lot specific data provided for your information. These particles are supplied as an aqueous suspension in dropper-tipped bottles.

LOT SPECIFICITY

Catalog Code:	NT21N, Lot Number: 8995
Certified Mean Diameter:	$4.17\mu\text{m} \pm 0.03\mu\text{m}$
Standard Deviation:	$0.173\mu\text{m}$
Coefficient of Variation:	4.1%
Microsphere Composition:	Polystyrene
Polymer Density:	$1.05\text{g} / \text{cm}^3$
Index of Refraction:	1.59 @ 589nm
Approximate Concentration:	1% solids