C 10-7

Thermo SCIENTIFIC

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DRI-CAL™ PARTICLE SIZE STANDARDS
NIST Traceable Mean Diameter

1. DESCRIPTION These size standards are part of a series of uniform polymer microspheres with calibrated mean diameters traceable to the Standard Meter through the National Institute of Standards and Technology (NIST) and provide an accurate source for traceable particle size calibration. Diameters from 5 to 100 micrometers (µm) are conveniently packaged as dry powders in dropper-tipped bottles to enable dispensing the microspheres directly into the sampling chamber. The certified mean diameter is traceable to NIST, calibrated by optical microscopy. Other values are for information only and should not be used as calibration values.

2. PHYSICAL DATA	Catalog Number: DC-10, Nominal 10 µm
Certified Mean Diameter:	9.8 µm ± 0.4 µm
Standard Deviation:	0.9 µm
Coefficient of Variation:	9.2%
Microsphere Composition:	Polystyrene DVB (Divinylbenzene, 4-8%)
Microsphere Density:	1.05 g/cm^3
Index of Refraction:	1.59 @ 589 nm
Approximate Concentration:	1.9 x 10^9 #/gram

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CERTIFICATE OF CALIBRATION AND TRACEABILITY

This certifies that the calibrated mean diameter of this product was transferred by optical microscopy from a stage micrometer calibrated by the National Institute of Standards and Technology (SRM 2800 SN411). NIST Standard Reference Materials 1690, 1692, 1960, and 1961 were used to validate the accuracy and traceability of the calibration methods.

Catalog Number: DC-10, DRI-CAL™ Particle Size Standards

Certification Date:	March 7, 2012
Certified Batch:	DC-10-012
Certified Mean Diameter:	9.8 µm
Expanded Uncertainty:	± 0.4 µm, k = 2

Ellen B. Layendecker 3/7/2012
Ellen B. Layendecker, Metrology Manager

Packaging Lot # 41683

Expiration Date: FEB'16

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