MOLECULAR PROBES®

CERTIFICATE OF ANALYSIS

Catalog Number	C37267
Product Name	Carboxyl latex, 4% w/v 0.3 µm
Appearance	white suspension
Medium	de-ionized water
Lot Number	1781097

Negatively charged polystyrene microspheres with carboxyl functional groups on the surface. Surface charge is pH dependent. Stable at neutral to high pH. Surface is hydrophobic in nature. STORE AT 2 - 8°C, DO NOT FREEZE

	LOT DATA	SPECIFICATION
PHYSICAL PROPERTIES OF PS[1]		
Density at 20°C	1.055 g / cm^3	n.a.
Refractive Index at 590 nm, 20°C	1.591	n.a.
TECHNICAL DATA		
Material Lot Number	1682436	n.a.
Mean Diameter (TEM)[2]	0.30 µm	0.25 - 0.35 µm
Standard Deviation of Diameter	0.020 µm	n.a.
Coefficient of Variation of Diameter	6.5 %	≤7 %
Percent Solids w/v	4.1 %	3.5 - 4.5 %
Carboxyl Charge Titration Data	15.3 µEq / g	n.a.
Bioburden Test	meets specification	0 CFU / mL
THE CALCULATED DATA		
Particle Number per Milliliter of Latex	2.8×10^{12}	n.a.
Specific Surface Area	1.9×10^5 cm^2/g	n.a.
Surface Charge Density	7.8 µC/cm^2	n.a.
Parking Area per Carboxyl Group	206 A^2 / COOH	n.a.
Carboxyl Groups per Particles	1.4×10^5	n.a.

1. *of polystyrene*
2. *by Transmission Electron Microscopy.*

Rachel Smith, Ph.D., Quality Assurance

27-Mar-2015

Life Technologies Corporation, on behalf of its Invitrogen business, Molecular Probes® labeling and detection technologies, certifies on the date above that this is an accurate record of the analysis of the subject lot and that the data conform to the specifications in effect for this product at the time of analysis.

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