ThermoFisher SCIENTIFIC

Life Technologies CERTIFICATE OF ANALYSIS

Catalog Number C37278
Product Name Carboxyl latex, 4% w/v 2 µm
Appearance white suspension
Medium deionized water
Lot Number 2271866

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	2271855	n.a.
Mean Diameter (TEM)[2]	1.9 µm	2.0 ± 0.3 µm
Standard Deviation of Diameter	0.16 µm	n.a.
Coefficient of Variation of Diameter	8.2 %	≤ 15 %
Percent Solids w/v	4.0 %	4.0 ± 0.5 %
Carboxyl Charge Titration Data	3.7 µEq / g	n.a.
Bioburden Test	meets specification	0 CFU / mL
THE CALCULATED DATA		
Particle Number per Milliliter of Latex	1.0 x 10^{10}	n.a.
Specific Surface Area	3.0 x 10^4 cm^2/g	n.a.
Surface Charge Density	11.8 µC/cm^2	n.a.
Parking Area per Carboxyl Group	136 A^2 / COOH	n.a.
Carboxyl Groups per Particles	8.3 x 10^6	n.a.

1. of polystyrene

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Printed Nov 30, 2020

2. by Transmission Electron Microscopy

Rachel Smith, Quality Assurance Manager
24-Nov-2020

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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