## **Life Technologies**

## **CERTIFICATE OF ANALYSIS**

Catalog Number C37278

Product Name Carboxyl latex, 4% w/v 2 μm

Appearancewhite suspensionMediumdeionized water

**Lot Number** 2716865

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 <sup>1</sup> Density at 20°C	1.055 g / cm <sup>3</sup>	n.a.
Refractive Index at 590 nm, 20°C	1.591	n.a.
TECHNICAL DATA  Material Lot Number	2538505	n.a.
Mean Diameter (TEM) <sup>2</sup>	2.1 µm	2.0 ± 0.3 μm
Standard Deviation of Diameter	0.12 μm	n.a.
Coefficient of Variation of Diameter	5.8 %	≤ 15 %
Percent Solids w/v	4.0 %	4.0 ± 0.5 %
Carboxyl Charge Titration Data	5.5 μEq / g	n.a.
Bioburden Test	meets specification	0 CFU / mL
THE CALCULATED DATA Particle Number per Milliliter of Latex	7.8 x 10 <sup>9</sup>	n.a.
Specific Surface Area	2.7 x 10 <sup>4</sup> cm <sup>2</sup> /g	n.a.
Surface Charge Density	19.6 μC/cm <sup>2</sup>	n.a.
Parking Area per Carboxyl Group	82 A <sup>2</sup> / COOH	n.a.
Carboxyl Groups per Particles	1.7 x 10 <sup>7</sup>	n.a.

1. of polystyrene

2. 1	bv Trans	mission	Electron	Microsco	D
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Zach Luedtke, Quality Assurance Manager 1-Sep-2022

Life Technologies Corporation 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.