## **Life Technologies**

## **CERTIFICATE OF ANALYSIS**

Catalog Number C37232

Product Name CML latex, 4% w/v 0.04 μm

Appearance white suspension

Medium deionized water

**Lot Number** 2530780

Negatively charged polystyrene microspheres with sulfate and high density of carboxyl functional groups on the surface.

Surface charge is pH dependent. Stable at wide range of pH. Surface is hydrophobic at low pH and somewhat hydrophilic at high pH.

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	2483604	n.a.
Mean Diameter (TEM) <sup>2</sup>	0.037 μm	0.04 ± 0.01 μm
Standard Deviation of Diameter	0.005 μm	n.a.
Coefficient of Variation of Diameter	12.2 %	≤ 20 %
Percent Solids w/v	4.0 %	3.5 - 4.5 %
Carboxyl Charge Titration Data	1013.0 μEq / g	n.a.
Bioburden Test	meets specification	0 CFU / mL
THE CALCULATED DATA Particle Number per Milliliter of Latex	1.4 x 10 <sup>15</sup>	n.a.
Specific Surface Area	1.5 x 10 <sup>6</sup> cm <sup>2</sup> /g	n.a.
Parking Area per Carboxyl Group <sup>3</sup>	25 A <sup>2</sup> / COOH	n.a.
Carboxyl Groups per Particles	1.7 x 10 <sup>4</sup>	n.a.

1. of polystyrene

2.	bv	Transmission	Electron	Microsco	טע
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3. assuming monolayer

Aaron Rider, Quality Control Supervisor

17-Mar-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.