## **Life Technologies**

## **CERTIFICATE OF ANALYSIS**

Catalog Number S37491

Product Name Sulfate latex, 8% w/v 0.2 μm

Appearance white suspension

Medium deionized water

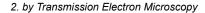
**Lot Number** 2260946

Surface charge is pH independent. Stable at wide range 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	1920516	n.a.
Mean Diameter (TEM) <sup>2</sup>	0.21 μm	0.15 - 0.25 μm
Standard Deviation of Diameter	0.010 μm	n.a.
Coefficient of Variation of Diameter	4.9 %	≤12 %
Percent Solids w/v	8.0 %	7.5 - 8.5 %
Sulfate Charge Titration Data	1.3 μEq / g	n.a.
Bioburden Test	meets specification	0 CFU / mL
THE CALCULATED DATA Particle Number per Milliliter of Latex	1.6 x 10 <sup>13</sup>	n.a.
Specific Surface Area	2.7 x 10 <sup>5</sup> cm <sup>2</sup> /g	n.a.
Surface Charge Density	0.5 μC/cm <sup>2</sup>	n.a.
Parking Area per Sulfate Group	3541 A <sup>2</sup> / SO <sub>4</sub>	n.a.
Charge Groups per Particle	$3.9 \times 10^3$	n.a.

1. of polystyrene





Rachel Smith, Quality Assurance Manager 8-Nov-2017

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.