

**Catalog Number** C37278  
**Product Name** Carboxyl latex, 4% w/v 2 µm  
**Appearance** white suspension  
**Medium** de-ionized water  
**Lot Number** 2145530

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
<b>PHYSICAL PROPERTIES OF PS<sup>1</sup></b>		
Density at 20°C	1.055 g / cm <sup>3</sup>	n.a.
Refractive Index at 590 nm, 20°C	1.591	n.a.
<b>TECHNICAL DATA</b>		
Material Lot Number	1348481	n.a.
Mean Diameter (TEM) <sup>2</sup>	1.9 µm	2.0 ± 0.3 µm
Standard Deviation of Diameter	0.16 µm	n.a.
Coefficient of Variation of Diameter	8.7 %	≤15 %
Percent Solids w/v	4.0 %	4.0 ± 0.5 %
Carboxyl Charge Titration Data	2.6 µEq / g	n.a.
Bioburden Test	meets specification	0 CFU / mL
<b>THE CALCULATED DATA</b>		
Particle Number per Milliliter of Latex	1.1 x 10 <sup>10</sup>	n.a.
Specific Surface Area	3.0 x 10 <sup>4</sup> cm <sup>2</sup> /g	n.a.
Surface Charge Density	8.3 µC/cm <sup>2</sup>	n.a.
Parking Area per Carboxyl Group	194 Å <sup>2</sup> / COOH	n.a.
Carboxyl Groups per Particles	5.8 x 10 <sup>6</sup>	n.a.

1. of polystyrene
2. by Transmission Electron Microscopy.



Rachel Smith, Quality Assurance Manager  
26-Mar-2013

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.