

**Catalog Number** A37283  
**Product Name** Aldehyde/Sulfate latex, 4% w/v 0.02 µm  
**Appearance** white suspension  
**Medium** de-ionized water  
**Lot Number** 1571807

Negatively charged polystyrene microspheres with sulfate and aldehyde functional groups on the surface.

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
<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	1242670	n.a.
Mean Diameter (TEM) <sup>2</sup>	0.028 µm	0.01 - 0.03 µm
Standard Deviation of Diameter	0.004 µm	n.a.
Coefficient of Variation of Diameter	15.3 %	≤25 %
Percent Solids w/v	4.0 %	3.5 - 4.5 %
Sulfate Charge Titration Data	73.3 µEq / g	n.a.
Aldehyde Titration Data	74.0 µEq / g	n.a.
Bioburden Test	meets specification	0 CFU / mL
<b>THE CALCULATED DATA</b>		
Particle Number per Milliliter of Latex	$3.3 \times 10^{15}$	n.a.
Specific Surface Area	$2.0 \times 10^6 \text{ cm}^2/\text{g}$	n.a.
Parking Area per Sulfate Group	$460 \text{ \AA}^2 / \text{SO}_4$	n.a.
Parking Area per Aldehyde Group	$456 \text{ \AA}^2 / \text{CHO}$	n.a.

1. of polystyrene

2. by Transmission Electron Microscopy.

*Betty Wood*

Betty Wood, Quality Assurance Manager

06-Nov-2012

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.