ThermoFisher SCIENTIFIC

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 2841616

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[1]		
Density at 20°C	1.055 g / cm^3	n.a.
Refractive Index at 590 nm, 20°C	1.591	n.a.
TECHNICAL DATA		
Material Lot Number	2483604	n.a.
Mean Diameter (TEM)[2]	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^{15}	n.a.
Specific Surface Area	1.5 x 10^6 cm^2/g	n.a.
Parking Area per Carboxyl Group[3]	25 A^2 / COOH	n.a.
Carboxyl Groups per Particles	1.7 x 10^4	n.a.

1. of polystyrene

Thermo Fisher Scientific
29851 Willow Creek Road
Eugene, OR 97402-9132
Phone +1-541-465-8300 Fax +1-541-335-0504

Printed Nov 20, 2023

2. by Transmission Electron Microscopy

3. assuming monolayer

Zach Luedtke, Quality Assurance Manager
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.

Thermo Fisher Scientific
29851 Willow Creek Road
Eugene, OR 97402-9132
Phone +1-541-465-8300 Fax +1-541-335-0504