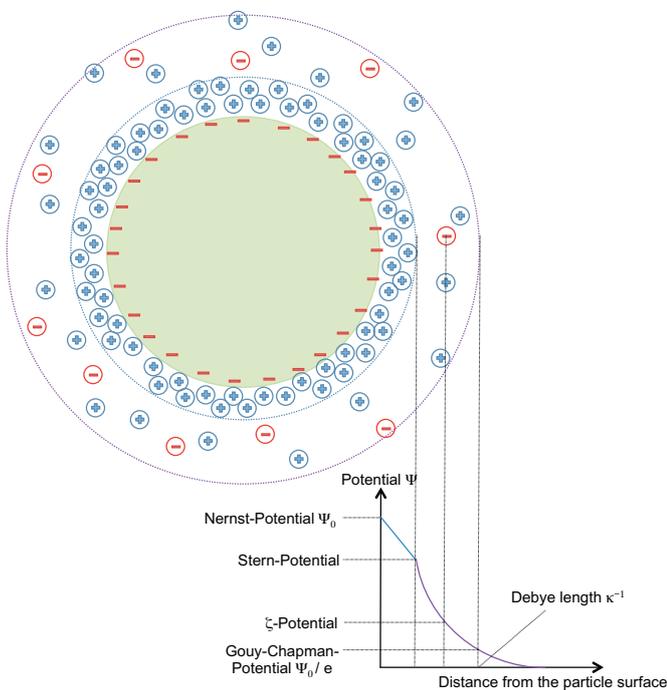


# Zeta Potential Control



Mobility measurements provide essential information in all kind of applications where adhesive surface effects play a role, such as in paint and ink manufacturing. Furthermore in water treatment, measurements of the zeta potential are applied to determine the isoelectric point of titration. Basically all colloidal interaction is driven by the zeta potential. The stability of charged particles or their tendency to agglomerate are determined by the strength of electrostatic repulsive forces, which are a function of the zeta potential. The zeta potential is highly affected by the surrounding medium and also different methods of zeta potential determination show different zeta potential values. Different methods cause varying accelerations of particles by external force. Measurements of the zeta potential by different methods are difficult to compare due to varying forces acting on the electric double-layer surrounding the particle. A reliable and stable zeta potential control defining the zeta potential according to the relevant method, is essential. The zeta potential controls by Applied Microspheres provide reliable zeta potential values for both electrophoretic mobility and streaming potential methods.

Applied Microspheres' Zeta Potential Controls consist of negatively charged polystyrene particle suspensions that are designed for reproducible zeta potential validation. A special formulation ensures that the negative charge is stronger than is the case with common polystyrene suspensions. The suspension has a negligible content of charged surfactant, resulting in the reduction of background noise. Applied Microspheres Zeta Potential Controls are supplied in single use, 3 ml or 10 ml luer lock syringes, packaged in boxes of 10 or 18 syringes. Shelf life is 18 months from date of packaging. They can be stored at room temperature.



Physical data	
Zeta potential value	-55 mV ± 10%
Particle composition	Surface modified polystyrene
Nominal diameter	200 nm
Particle density	1.05 g/cm <sup>3</sup>
Refractive index	1.59 @ 589 nm
Solids content	0.02%
pH value	10.0 ± 1.0



#### Ordering information

Product identification number	Description	Volume/syringe	Package size
70318C	Zeta Potential Control	3 ml	18
71010C	Zeta Potential Control	10 ml	10