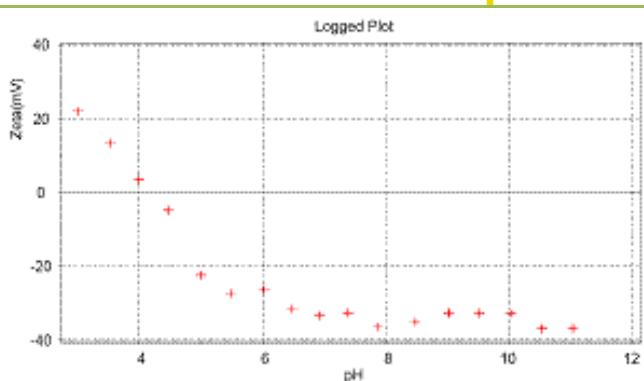




## Material

## Zirconium dioxide ( $\text{ZrO}_2$ )

<b>Charge description/ NanoCare Product number</b>	CH-000216 8.3
<b>Provider</b>	ItN Nanovation AG
<b>Available form</b>	Suspension in water
<b>Primary particle size [<math>d_{50}</math> in nm]</b>	460.7 nm
<b>Particle size distribution</b>	
<b>pH</b>	9.45 (in water)
<b>BET Surface area</b>	96 $\text{m}^2/\text{g}$
<b>Particle morphology</b>	Irregular spherical
<b>Crystal phase and crystallinity</b>	Mixed phase monocline (75%)/ tetragonal (25%)
<b>Stabilisation</b>	Ammoniumpolyacrylate
<b>Solubility in water</b>	190 ppm
<b>Purity/contamination</b>	O 60 % Zr 37 % Cl 3 %
<b>REM/TEM</b>	
<b>Zeta potential (in water)</b>	

**Zeta potential  
(in DMEM + FCS)****Surface area chemistry**

O	48 %
Zr	21 %
C	18 %
N	12%
Cl	0.6 %