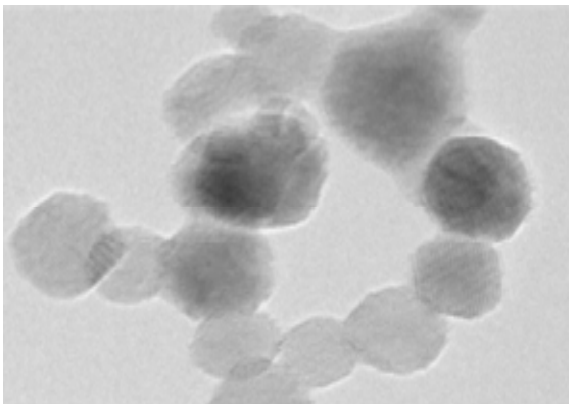
Nano Zirconium Oxide Dispersion-ZR 105

5 w% in water

Characterization:

Average Particle size: 10-15 nm.(BET)	Appearance: Milky viscous liquid	PH : 9
Concentration : 5 w% in water	Viscosity : 3 Cp	Density: 1.33 gm/ml
conductivity : 943 uS	Colour :White	Purity :99.983%
Zeta potential : 55.7% <62.11nm 44.3% <253.2 nm	Specific Surface Area:70-105 m2/gm	True density:5.68g/cc

Crustal Structure: tetragonal: 63.5%, Monoclinic: 36.5%



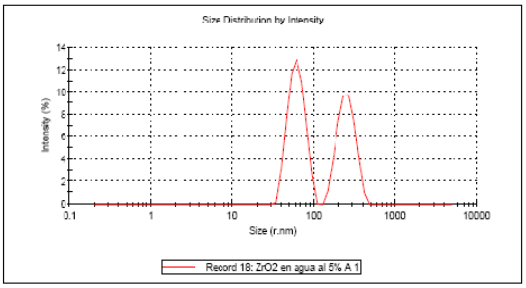
Crystallite size of Nano Zirconium Oxide ZR 105

BET Surface Area Report

BET Surface Area: 87.4767 ± 0.2245 m²/g
Slope: 0.049386 ± 0.000126 g/cm³
Y-Intercept: 0.000378 ± 0.000021 g/cm³
C: 131.525168
Qm: 20.0948 cm³/g STP
Correlation Coefficient: 0.9999902
Molecular Cross-Sectional Area: 0.1620 nm²

Relative Pressure (P/Po)	Quantity Adsorbed (cm³/g STP)	1/[Q(Po/P - 1)]
0.051322420	18.6499	0.002901
0.103408637	20.9411	0.005508
0.145968283	22.5216	0.007589
0.195478855	24.2675	0.010012
0.246057466	26.0300	0.012538

		Size (r.nm...	% Intensity	Width (r.n...
Z-Average (r.nm): 92,53	Peak 1:	62,11	55,7	14,21
PdI: 0,423	Peak 2:	253,2	44,3	60,01
Intercept: 0,901	Peak 3:	0,000	0,0	0,000
Result quality Good				



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