

Silica — Nitrophenyl Groups

SKU: SN19-SI

Description

- The range of non-metallic nanoparticles, with various functionalities, are part of our recently developed products based on our own unique manufacturing technique
- These materials could be used for further functionalisation with biomolecules, chelators and binding sites for various applications.

Applications

- ◆ Biomolecules adsorption and separation
- ◆ Bioconjugation
- ◆ Heavy metal ion separation
- ◆ Water and wastewater purification
- ◆ Theranostics platform
- ◆ Paints and coatings
- ◆ Pharmaceuticals and cosmetics
- ◆ Packaging

Technical Information

Physical: Average size of 200 nm and available either as a nanopowder or as a dispersion (default solvent is iso-propanol).

Characteristics: The solution has good stability and shelf life, and can be ordered in different sizes, volumes and solvents.

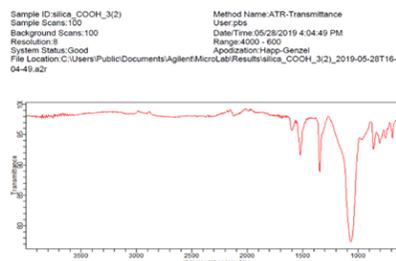


Fig 1: ATR FT-IR Spectrum

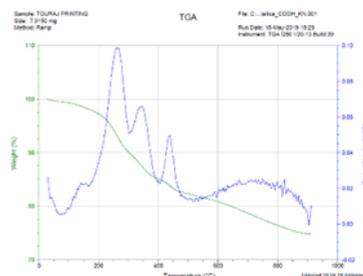


Fig 2: TGA

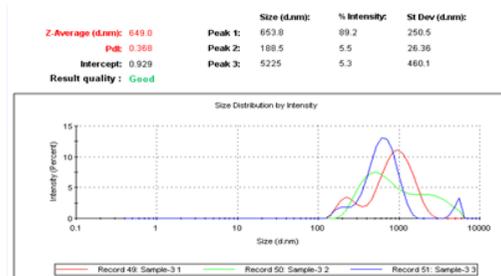
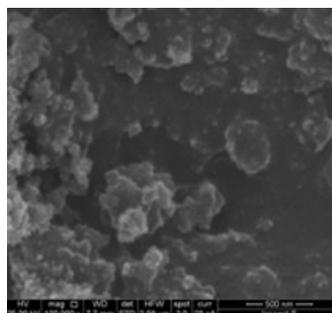
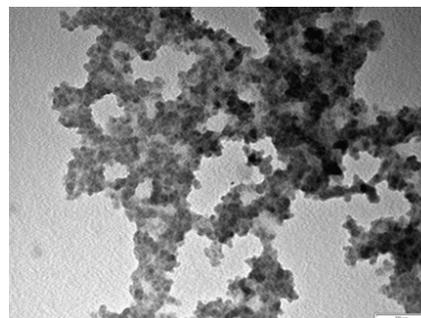


Fig 3: DLS

Fig 4:
SEMFig 5:
TEM

Layer Info	Analyte	Result	(Std. Dev.)	Proc. Calc.	Line	Intensity
1 Layer1						
1 Layer Layer1		4.000	um	(-----) Fix		
1 Elem. CH2		100.000	%	(-----) Fix		
B Base						
2 Elem. SiO2		46.613	%	(0.018) Quant. -FP	SiKa	18.8939
2 Elem. S03		0.026	%	(0.001) Quant. -FP	S Ka	0.0214
2 Elem. CH0		53.361	%	(-----) Balance		

Group: easyvacU4um5nm400sox
 Sample: TE_S3 SL_COOH V

Fig 6: XRF Analysis