

Silica — Decylphenyl Groups

SKU: SN22-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 THF).

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

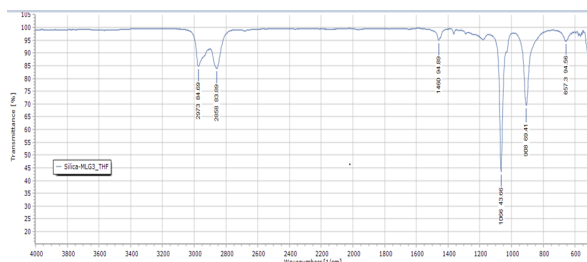


Fig 1: ATR FT-IR Spectrum

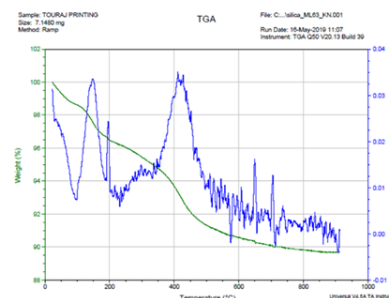
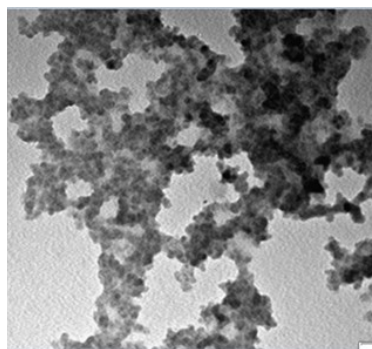


Fig 2: TGA



Fig 3: DLS

Fig 4:
SEM

Layer Info	Analyte	Result	(Std. Dev.)	Proc.-Calc.	Line	Intensity
Group: easyairU4µm5mm400sox						
Sample: TE_S5 SI_DEC A						
1	Layer1					
1	Layer	Layer1	4.000	µm	(-----) Fix	-----
1	Elem.	CH2	100.000	%	(-----) Fix	-----

B	Base					
2	Elem.	SiO2	62.847	%	(0.086) Quant.-FP SiKa	1.3180
2	Elem.	CaO	0.022	%	(0.001) Quant.-FP CaKa	0.0534
2	Elem.	Gd2O3	0.014	%	(0.001) Quant.-FP GdLa	0.1364
2	Elem.	CHO	37.117	%	(-----) Balance	-----

Fig 5: XRF
Analysis