

Alumina — Nitrophenyl Groups

SKU: SN16-AL

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 50 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 used as ink, and can be ordered in different sizes, volumes and solvents.

Sample ID: alumina NO2 (sample 2)
 Background Scans: 128
 Resolution: 8
 System Status: Good
 File Location: C:\Users\Public\Documents\Agilent\MicroLab\Results\alumina NO2 (sample 2)_2019-05-29T12:39:35.ad7

Method Name: ATR-Transmittance
 User: pbs
 Date/Time: 05/29/2019 12:39:35 PM
 Range: 4000 - 600
 Apodization: Happ-Genzel

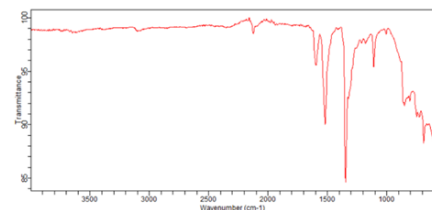


Fig 1: ATR-IR Spectrum

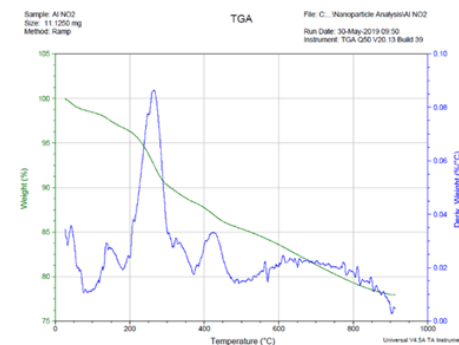


Fig 2: TGA

Group: easyvacU4µm5mm400sox
 Sample: TE_S2_AL_NO2V

Layer Info	Analyte	Result	(Std. Dev.)	Proc.-Calc.	Line	Intensity
1 Layer1						
1 Layer	Layer1	4.000	µm	(-----)	Fix	-----
1 Elem.	CH2	100.000	%	(-----)	Fix	-----

B Base						
2 Elem.	Al2O3	71.632	%	{ 0.036}	Quant.-FP AlKa	9.9997
2 Elem.	SiO2	0.800	%	{ 0.004}	Quant.-FP SiKa	0.1521
2 Elem.	S03	0.311	%	{ 0.001}	Quant.-FP S Ka	0.2096
2 Elem.	Cu0	0.005	%	{ 0.000}	Quant.-FP CuKa	0.3503
2 Elem.	Ni0	0.004	%	{ 0.000}	Quant.-FP NiKa	0.1627
2 Elem.	CH0	27.248	%	{-----}	Balance	-----

Fig 3: XRF Analysis

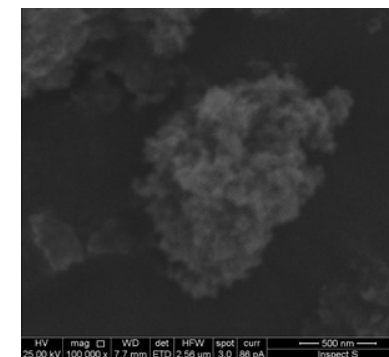


Fig 4: SEM