

Product data sheet

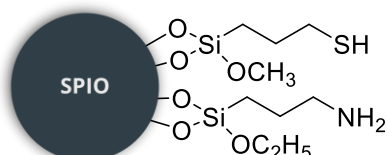
Name of the product: SPIO-NH₂/SH, suspended in deionised water, 5 mg/mL or powder.

Guarantee: 6 months in suspension or 1 year in powder from manufacture, under the specified storage conditions.

Product number: SP1NS12

Storage: 4 – 25°C. DO NOT FREEZE.

Product representation :



Usage: Ensure the nanoparticles are well dispersed in the medium prior to use.

In **suspension**, shake vigorously before use, bath sonication is strongly recommended.

In **powder**, to use in suspension, bath sonication is needed.

Product specifications:

Property	Unit	Specifications	
		Min.	Max.
Characterization technique			
Appearance (Back or brown powder)	-	-	-
Visual Inspection			
Magnetic	-	-	-
Test with magnet			
Presence of the molecules at the surface	-	-	-
Infrared analysis (IR)			
Loading of -SH at the surface of the nanoparticles	Nb*/nm ²		
X-ray fluorescence (XF)	SH/nm ²	4	5
X-ray fluorescence (XF) (calculated)	NH ₂ /nm ²	4	5
Elemental analysis (EA)	SH/nm ²	4	5
Elemental analysis (EA)	NH ₂ /nm ²	4	5
Phase of SPIO (Magnetite)	-	-	-
X-ray Diffraction (XRD)			
Crystallite size	nm	10	20
X-ray Diffraction (XRD)			
Mesh parameter	Å	8.370	8.390
X-ray Diffraction (XRD)			
Oxygen stoichiometry	-	0	0.111
X-ray Diffraction (XRD)			
Fe ²⁺ /Fe ³⁺ ratio	-	0	50
X-ray Diffraction (XRD)			
Mean particle size	nm	10	20
Transmission Electron Microscopy (TEM)			

*Nb = number of molecules