

Product data sheet

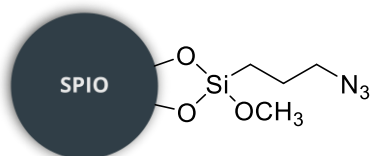
Name of the product: SPIO-N₃, suspended in deionised water, 5 mg/mL or powder.

Guarantee: 1 year from manufacture, under the specified storage conditions.

Product number: SP1N312

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 <i>Characterization technique</i>	Unit	Specifications	
		Min.	Max.
Appearance (Back or brown powder) <i>Visual Inspection</i>	-	-	-
Magnetic <i>Test with magnet</i>	-	-	-
Presence of the molecule at the surface <i>Infrared analysis (IR)</i>	-	-	-
Loading of -N₃ at the surface of the nanoparticles <i>Thermogravimetric analysis (TGA)</i>	Nb*/nm ²	3	11
Phase of SPIO (Magnetite) <i>X-ray Diffraction (XRD)</i>	-	-	-
Crystallite size <i>X-ray Diffraction (XRD)</i>	nm	10	20
Mesh parameter <i>X-ray Diffraction (XRD)</i>	Å	8.370	8.390
Oxygen stoichiometry <i>X-ray Diffraction (XRD)</i>	-	0	0.111
Fe²⁺/Fe³⁺ ratio <i>X-ray Diffraction (XRD)</i>	-	0	50
Mean particle size <i>Transmission Electron Microscopy (TEM)</i>	nm	10	20

*Nb = number of molecules