

# Product data sheet

**Name of the product:** SPIO-Te, powder

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

**Product number:** SP1TE12

**Storage:** 15 - 25°C. DO NOT FREEZE.

**Product representation:**



**Usage:** Ensure the nanoparticles are well dispersed in the medium prior to use : to use in suspension, bath sonication is needed.

## Product specifications:

<b>Property</b>	<b>Unit</b>	<b>Specifications</b>	
		<b>Min.</b>	<b>Max.</b>
<b>Characterization technique</b>			
<b>Appearance (Black or brown powder)</b>		-	-
<i>Visual Inspection</i>		-	-
<b>Magnetic</b>		-	-
<i>Test with magnet</i>		-	-
<b>Metal mass percentage</b>	wt%	3	6
<i>X-ray fluorescence (XF)</i>			
<b>Phase of SPIO (Magnetite)</b>		-	-
<i>X-ray Diffraction (XRD)</i>		-	-
<b>Crystallite size</b>	nm	10	20
<i>X-ray Diffraction (XRD)</i>			
<b>Mesh parameter</b>	Å	8.370	8.390
<i>X-ray Diffraction (XRD)</i>			
<b>Oxygen stoichiometry</b>	-	0	0.111
<i>X-ray Diffraction (XRD)</i>			
<b>Fe<sup>2+</sup>/Fe<sup>3+</sup>ratio</b>	-	0	50
<i>X-ray Diffraction (XRD)</i>			
<b>Mean particle size</b>	nm	10	20
<i>Transmission Electron Microscopy (TEM)</i>			