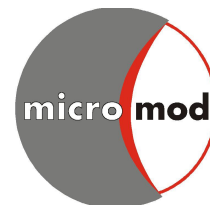


TECHNICAL DATA SHEET



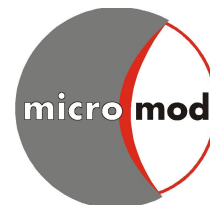
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Germany

Telephone: + 49 381 / 54 34 56 10
Fax: + 49 381 / 54 34 56 20
E-mail address: info@micromod.de

Product code:	79-00-201
Product name:	nanomag®-D-spio
Surface:	plain
Size:	20 nm
Solid content:	25 mg/ml
Composition:	dextran iron oxide composite particles
Polydispersity index:	< 0.2
Shape:	cluster-typed
Density:	1.4 g/ccm
Iron concentration:	2.4 mg/ml
Magnetization:	54 emu/g iron (H =1000 Oe)
Saturation magnetization:	>69 emu/g iron (H > 10.000 Oe)
Coercive field Hc:	0.049 kA/m
Stable in:	aqueous buffers pH > 4
Not stable in:	organic solvents, acidic solutions pH < 4
Product form:	suspension in water
Particles per ml:	1.6*10E15
Particles per mg:	1.6*10E14
Colour:	dark brown
Additional remarks:	Storage at 2 - 8°C for 6 months
TECHNOTES:	The mean hydrodynamic particle diameter may vary in the range of 20-100 nm (Z-Average, photon correlation spectroscopy).

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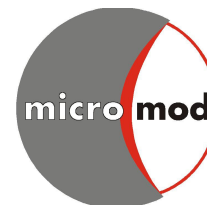
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Product code:	79-01-201
Product name:	nanomag®-D-spio
Surface:	NH ₂
Size:	20 nm
Solid content:	5 mg/ml
Composition:	dextran iron oxide composite particles
Polydispersity index:	< 0.2
Shape:	cluster-typed
Density:	1.4 g/ccm
Iron concentration:	2.4 mg/ml
Magnetization:	54 emu/g iron (H =1000 Oe)
Saturation magnetization:	>69 emu/g iron (H > 10.000 Oe)
Coercive field H_c:	0.049 kA/m
Stable in:	aqueous buffers pH > 4
Not stable in:	organic solvents, acidic solutions pH < 4
Product form:	suspension in water
Particles per ml:	8.0*10E14
Particles per mg:	1.6*10E14
Surface charge density:	3 µmol/ g iron
Colour:	dark brown
Additional remarks:	Storage at 2 - 8°C for 6 months
TECHNOTES:	The mean hydrodynamic particle diameter may vary in the range of 20-110 nm (Z-Average, photon correlation spectroscopy).

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Product code:	79-02-201
Product name:	nanomag®-D-spio
Surface:	COOH
Size:	20 nm
Solid content:	5 mg/ml
Composition:	dextran iron oxide composite particles
Polydispersity index:	< 0.2
Shape:	cluster-typed
Density:	1.4 g/ccm
Iron concentration:	2.4 mg/ml
Magnetization:	54 emu/g iron (H =1000 Oe)
Saturation magnetization:	>69 emu/g iron (H > 10.000 Oe)
Coercive field Hc:	0.049 kA/m
Stable in:	aqueous buffers pH > 4
Not stable in:	organic solvents, acidic solutions pH < 4
Product form:	suspension in water
Particles per ml:	8.0*10E14
Particles per mg:	1.6*10E14
Surface charge density:	3 µmol/ g iron
Protein binding capacity:	1.5 µg albumin (BSA) / mg particle (1 molecule albumin per particle)
Colour:	dark brown
Additional remarks:	Storage at 2 - 8°C for 6 months
TECHNOTES:	The mean hydrodynamic particle diameter may vary in the range of 50-110 nm (Z-Average, photon correlation spectroscopy).