Center for Applied Nanotechnology

CANdot® Series M

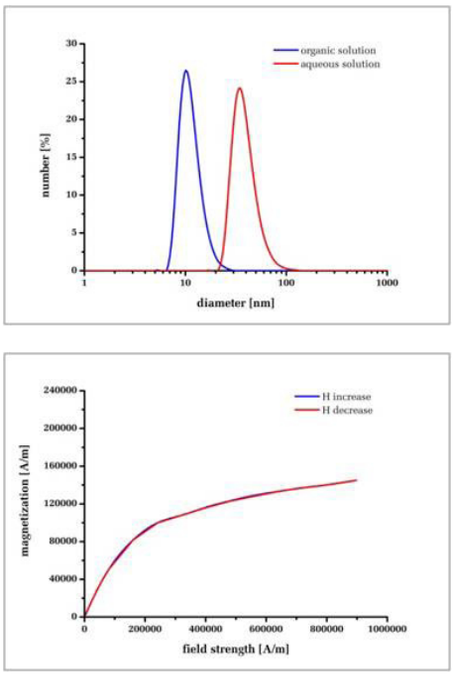
CANdot® Series M: iron oxide nanoparticles with superparamagnetic properties. Due to our unique expertise in the production of homogeneously dispersed inorganic nanoparticles, our CANdot® Series M particles exhibit a spherical shape with a narrow size distribution (< 10%) and high stability in solution. They are available with a diameter of 4, 12, 16 and 20 nm.

For technical applications, the CANdot® Series M particles are available as a solution in nonpolar organic solvents like toluene or hexane with a concentration of 10 mg/mL.

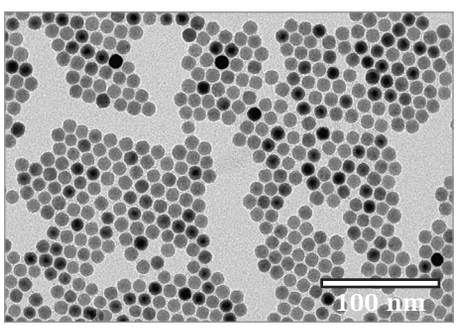
Using our innovative ligand exchange process we can provide these iron oxide particles as a 5 µM solution in water, too. These particles are available with functional groups on the surface for further modification e.g. coupling with affinity molecules.

Series M org	
Solvent and ligand	toluene oleic acid
Particle size (diameter)	4, 12, 16 or 20 nm
Stability	> 1 year (in solution)
Concentration available	10 mg/mL in toluene

Series M aqua	
Solvent and ligand	water polymer with -NH_2
Particle size (diameter)	12, 16 or 20 nm
Stability	3 months (in solution)
Concentration available	5 µM



CANdot® Series M - DLS (top) and magnetization curve (bottom)



CANdot® Series M 12 nm - TEM image

CAN GmbH
Grindelallee 117
20146 Hamburg, Germany
T +49.40.42838 - 4983
F +49.40.42838 - 5797
info@can-hamburg.de
www.can-hamburg.com

Contact (email)
candots@can-hamburg.de