## **Technical Specifications**

## Fe<sub>3</sub>O<sub>4</sub> In Water

Composition	Iron(III) Oxide nanoparticles			
Stabilizing ligand	Modified PEG (10 carbons long, methyl terminated)			
Concentration	Order amount dependent			
Organic Impurities	<1% (not including ligands)			
Solvent	Water			
Volume	Order amount dependent			
Lifetime	At least 6 months if stored properly. Dark at room temperature			
Size Distribution	<b>Distribution</b> ±20% of particle size			
pH Stability	~8			
Zeta Potential	-10 to -30 mV			

Catalogue #	Particle diameter (nm)	Magnetization (M)	Minimum Magnetic Susceptibility (xg)	Molecular weight (with ligands) (g/mol)	nmol/mg
FEOW-5	5±1	> 25 emu/g	0.0030 c.g.s	3.6E05	2.5
FEOW-10	10±2	> 45 emu/g	0.0047 c.g.s	2.3E06	0.5
FEOW-20	20±3	> 20 emu/g	0.0062 c.g.s	1.6E07	0.1
FEOW-30	30±4	> 10 emu/g	NA	5.0E07	0.05