

Materials List for:

Dispersion of Nanomaterials in Aqueous Media: Towards Protocol Optimization

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Materials

Name	Company	Catalog Number	Comments
Cerium oxide nanopowder	Sigma-Aldrich	544841	<25 nm particle size (BET)
Zinc oxide	European Commission's Joint Research Centre (JRC)	NM110	hydrophylic
Zinc oxide	European Commission's Joint Research Centre (JRC)	NM111	hydrophobic
Multi walled carbon nanotubes	NanoMile project (Large Collaborative Project under the European Commission's 7th Framework Programme)	A32 (MWCNT1)	3.0±1.8 µm long, O/C ratio of 4.5%
Multi walled carbon nanotubes	NanoMile project	A106 (MWCNT2)	3.3±2.4 µm long, O/C ratio of 7%
Silver dispersion	Sigma-Aldrich	730785	10 nm particle size (TEM), 0.02 mg/mL
Zetasizer nano	Malvern Instruments		Particle size and zeta-potential measurements
Disc Centrifuge	CPS instruments Inc.	Model DC 24000	Particle size distribution by centrifugal sedimentation
Transmission electron microscope	JEOL USA	Jeol 1200EX TEM	Bright field images, particle size, shape, agglomeration
Ultrasonic probe fitted with a vial tweeter	Hielscher	UIS250V	Sonicator
Ultrasonic bath	Branson	Model 1510	Sonicator
Eppendorf vials	Eppendorf	2236411-1	1.5ml capacity
UV-vis spectrophotometer	Jenson flight deck	Model 6800	SPR peaks, suspension stability
Disposable folded capillary cell	Malvern Instruments	DTS 1070	for the measurement of elec
Zeta- potential standard	Malvern Instruments	DTS 1235	
Quartz cuvette	Jasco	1103-0042	Rectangular quartz cell 10 x 100 Spectrosil Quartz with lid 190 -2700 nm