

Materials List for:

Grafting Multiwalled Carbon Nanotubes with Polystyrene to Enable Self-Assembly and Anisotropic Patchiness

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Materials

Name	Company	Catalog Number	Comments
Tetrapropylammonium bromide, 99 % (TPABr)	Sigma-Aldrich	88104	Irritant, toxic
Potassium permanganate, 99 % (KMnO ₄)	Sigma-Aldrich	223468	
Acetic acid, 99.5 %	Sigma-Aldrich	45726	
Pristine multiwalled carbon nanotubes, 99 % (MWCNTs)	Bayer Technology Services	Donated sample	Harmful dusts.>1 micrometer in length and 13–16 nm in outer diameter. Alternative supplier: Nanocyl, Catalog N. NC7000, website: http://www.nanocyl.com/
Sodium Chloride, 98 % (NaCl)	Sigma-Aldrich	S3014	Technical grade can also be used
Ethanol, 99.8 % (EtOH)	Sigma-Aldrich	32221	Technical grade can also be used
Methanol, 99.8 % (MeOH)	Sigma-Aldrich	322415	Highly toxic. Technical grade can also be used
Hydroquinone, 99 %	Sigma-Aldrich	H9003	
Toluene, 99.8 %	Sigma-Aldrich	244511	Anhydrous
3-(Trimethoxysilyl)propyl methacrylate, 98 % (TMSPMA)	Sigma-Aldrich	440159	Air sensitive, toxic
Azobisisobutyronitrile, 99 % (AIBN)	Sigma-Aldrich	755745	Explosive
Styrene, 99 %	Sigma-Aldrich	S4972	Purified using an alumina gel preparative column and stored at 4 °C
Acetone, 99.5 %	Sigma-Aldrich	179124	Technical grade can also be used
Tetrahydrofuran, 99.9 % (THF)	Sigma-Aldrich	494461	
Dichloromethane, 99.5 %	Sigma-Aldrich	443484	Highly toxic
Hydrochloric acid, 37 %	Sigma-Aldrich	435570	Harmful fumes