

Materials List for:

# Nanosponge Tunability in Size and Crosslinking Density

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## Materials

Name	Company	Catalog Number	Comments
2,2'-(Ethylenedioxy)bis(ethylamine)	Sigma-Aldrich	385506-100ML	
3-methyl-1-butanol	Sigma-Aldrich	309435-100ML	anhydrous, ≥99%
Acetone	Sigma-Aldrich	179124-4L	
Allyl bromide	Sigma-Aldrich	A29585-5G	≥99%
Ammonium chloride	Fisher Scientific	A661-500	saturated solution in DI water
Cell culture water	Sigma-Aldrich	W3500-500ML	Filtered through 0.45 µm syringe filter
Dichloromethane (DCM)	Sigma-Aldrich	270997-100ML	anhydrous, ≥99%, contains 40 - 150 ppm amylene as stabilizer
Ethyl Acetate	Fisher Scientific	E145SK-4	
EZFlow 0.2 µm Syringe Filter	Foxx Life Sciences	386-2116-OEM	Hydrophillic PTFE, 13 mm
EZFlow 0.45 µm Syringe Filter	Foxx Life Sciences	386-3126-OEM	Hydrophillic PTFE, 25 mm
Fisherbrand Disposable Borosilicate Glass Test Tubes with Plain End	Fisher Scientific	14-961-31	
Fisherbrand Microcentrifuge Tubes	Fisher Scientific	14-666-318	1.5 mL
Hamilton Microliter Syringe, 100 µL	Hamilton Company	80600	Model 710 N SYR, Cemented ND, 22s ga, 2 in, point style 2
Hexamethylphosphoramide	Sigma-Aldrich	H11602-100G	≥99%, contains ≤1,000 ppm propylene oxide as stabilizer
Hexanes	Fisher Scientific	H292-4	
Magnesium sulfate anhydrous	Fisher Scientific	M65-500	
Meta-chloroperoxybenzoic acid	Sigma-Aldrich	273031-100G	Purified to ≥99% by buffer wash
Methanol (MeOH)	Sigma-Aldrich	322415-100ML	anhydrous, ≥99%
N-butyllithium solution	Sigma-Aldrich	230707-100ML	2.5 M in hexanes
N,N-diisopropylethylamine	Sigma-Aldrich	550043-500ML	≥99%
Parafilm M	Sigma-Aldrich	P7793-1EA	
PELCO Pro Reverse (Self-Closing) Tweezers	Ted Pella, Inc.	5375-NM	
Phosphotungstic acid hydrate	Alfa Aesar	40116	
Q55 Sonicator	Qsonica	Q55-110	55 Watts, 20 kHz
SiliaMetS Cysteine	Silicycle	R80530B-10g	
SnakeSkin Dialysis Clips	Thermo Scientific	68011	
SnakeSkin Dialysis Tubing, 10K MWCO	Thermo Scientific	68100	
Sodium bicarbonate	Fisher Scientific	5233-500	saturated solution in DI water

TEM grid	Ted Pella, Inc.	01822-F	Ultrathin Carbon Type-A, 400 mesh, Copper, approx. grid hole size: 42 $\mu$ m
Tetrahydrofuran (THF)	Sigma-Aldrich	401757-1L	Anhydrous, $\geq$ 99.9%, inhibitor-free
Tin(II) trifluoromethanesulfonate	Sigma-Aldrich	388122-1G	
Vortex-Genie 2	Scientific Industries	SI-0236	
Whatman Filter Paper, Grade 1	Fisher Scientific	09-805H	Circles, 185 mm
$\delta$ -valerolactone	Sigma-Aldrich	389579-100ML	Purified by vacuum distillation