

# Formulation and Acoustic Modulation of Optically Vaporized Perfluorocarbon Nanodroplets

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## Materials

Name	Company	Catalog Number	Comments
Ammonium Persulfate (APS)	VWR	97064-592	
1,2-distearoyl-sn-glycero-3-phosphocholine (DSPC)	Avanti Polar Lipids	850365C	Lipids, these can be purchased suspended in chloroform or in powder form. For long term storage, powder form is the best but chloroform is more practical.
1,2-distearoyl-sn-glycero-3-phosphoethanolamine-N-[methoxy(polyethylene glycol)-2000] (ammonium salt) (DSPE-PEG)	Avanti Polar Lipids	880120C	Lipids, these can be purchased suspended in chloroform or in powder form. For long term storage, powder form is the best but chloroform is more practical.
Acrylamide : Bisacrylamide solution (19:1) 40% (w/v), OmniPur®	VWR	EM-1300	acrylamide solution, lower concentration/ powder
IR-1048	Sigma	405175	Infrared dye
L11-4v	Verasonics	-	ultrasound linear array transducer
Microtip 1/8"	Qsonica LLC	4418	microtip for probe sonicator
N, N, N', N' - Tetramethylethylenediamine (TEMED)	VWR	97064-902	Used to polymerize polyacrylamide by forming free radicals in the presence of ammonium persulfate
Nova II	Ophir-Spiricon	7Z01550	laser power meter
Perfluorohexane	Fluoromed	APF-60M	perfluorocarbon liquid
Phosphate buffered saline (PBS) tablets	VWR	97062-732	Tablets used to make PBS
Q500	Qsonica LLC	Q500-110	Probe sonicator
Silica gel	Sigma-Aldrich	288500	2-25 µm particle size
Tempest 30	New wave research	-	Pulsed laser system
Vantage 128	Verasonics	-	research ultrasound imaging system
Zetasizer Nano ZS	Malvern Instruments Ltd	-	Makes size measurements based on dynamic light scattering