

Materials List for:

Preparation of Light-responsive Membranes by a Combined Surface Grafting and Postmodification Process

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Materials

Name	Company	Catalog Number	Comments
2-Hydroxyethyl methacrylate, 97%	Sigma-Aldrich	128635	
Hexane 99%	Biosolve		
Magnesium sulfate (MgSO ₄ , anhydrous)	Sigma-Aldrich	M7506	
Methanol, 99%	Sigma-Aldrich	14262	dried over molecular sieves
N,N-Dicyclohexylcarbodiimide, 99%	Sigma-Aldrich	D8002	
Dimethyl aminopyridine, 99%	Sigma-Aldrich	107700	
Tert-butylmethylether, 98%	Fluka	306975	
Polycarbonate membrane	Whatman		Nanopore Track Etched (TE) (1.0 µm, 0.2 µm, 0.1 µm, 50 nm, 30 nm, and 15 nm pore diameter; 47 mm or 25 mm membrane diameter)
Caffeine (reagent plus)	Sigma-Aldrich	C0750	
Franz diffusion cell (12 ml)	SES-Analysesysteme	6C010015	15 mm unjacketed Franz Cell, 12 ml Receptor volume, Flat ground, clear glass, stirbar and clamp
UV-Lamp			UV irradiation (366 nm, 15 W/m ²)
White light lamp			White light irradiation (500 W bulb)
UV/Vis spectrophotometer	Varian 50Bio/50MPR		
Polyester membranes	Sterlitech	PET0225100	Polyester Membrane Filters, 0.2 µm pore diameter, 25 mm diameter
Polyvinylidene fluoride membranes	Millipore		PVDF Membranes Durapore (0.22 µm pore diameter; 47 mm membrane diameter)
Argon (99.9995%)	Alphagaz		
Dressler Cesar RF Power Generator			Plasma chamber setup
MKS Multi Gas Controller 647C			Plasma chamber setup
MKS Mass-Flow controllers			Plasma chamber setup
Vacuubrand RE 2.5 rotary vane vacuum pump			Plasma chamber setup
Contact angle measurement device	Krüss	G10	
Balances	Mettler Toledo	AB204-S and Mettler ME30	