

Materials List for:

Combination of Microstereolithography and Electrospinning to Produce Membranes Equipped with Niches for Corneal Regeneration

Ílida Ortega¹, Farshid Sefat¹, Pallavi Deshpande¹, Thomas Paterson¹, Charanya Ramachandran³, Anthony J. Ryan², Sheila MacNeil¹, Frederik Claeyssens¹

¹Department of Materials Science and Engineering, University of Sheffield

²Department of Chemistry, University of Sheffield

³L. V. Prasad Eye Institute

Correspondence to: Ílida Ortega at i.ortega@sheffield.ac.uk, Frederik Claeyssens at f.claeyssens@sheffield.ac.uk

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Materials

Name	Company	Catalog Number	Comments
Poly (lactic-co-glycolic acid)	Purac	PDLG5004	
Dichloromethane	Sigma Aldrich Or Fisher	270997 Or D/1850/17	>99.8% contains 50-150 ppm amylene stabilizer
Digital Micromirror Device (DMD) Discovery 1100 Controller Board & Starter Kit	Texas Instruments	1076N732 (UV)	
473 nm Laser	Laser 2000	MBL-III	150 mW
Poly (ethylene glycol) diacrylate	Sigma Aldrich	475629	Mn = 250 g/mol, 500 ml
DEMEM + Glutamax	Fisher	12077549	
Ham's F12	Labtech biosera	LMH1236/500	
Fetal Bovine Serum	Labtech biosera	FB-1090/50	
EGF	R&D	236-EG-200	
Insulin	Sigma Aldrich	91077C-1G	
Amphotericin	Sigma Aldrich	A2942-100ml	
Penicillin/streptomycin	Sigma Aldrich	P0781-100ml	
DAPI	Sigma Aldrich	32670	
Propidium iodide	Sigma Aldrich	P4864	
Thrombin	Sigma Aldrich	T9326	
Fibrinogen	Sigma Aldrich	F3879	
p63	Sigma Aldrich	P3737	
CK3	Merck Millipore	CLB218	
Hematoxylin	SLS	HHS16-500ML	
Eosin	Sigma Aldrich	HT110232-1L	
Medical grade bag (PET/Foil/LDPE) Peelable pouch	Riverside Medical Ltd. Derby, UK	Foil laminate PET/Foil/LDPE, (12,7,50)	
Gamma- irradiation (Sterilization)	Applied Sterilisation Technologies (Synergy Health Laboratory Services (SHLS), Abergavenny UK) - external dose range of 25-40 KGy		
Silica gel orange	Sigma Aldrich	10087	
Cobalt (II) chloride	Sigma Aldrich	232696	
Copper (II) sulfate	Sigma-Aldrich	C-1297	
Six spot humidity indicator card	SCC, USA	6HIC200	

Vacuum heat seal machine	Andrew James UK Ltd, Bowburn, UK	VS518	
Andrew James Vacuum Sealer rolls 28 cm x 40 meter rolls	Andrew James UK Ltd, Bowburn, UK	BR2805	
Scanning Electron Microscope (SEM)	Philips/FEI XL-20 SEM		
Confocal Microscope	Zeiss LSM 510 META		
Videne Antiseptic Solution	Ecolab, Swindon, UK		3%