

Materials List for:

Synthesis of Soft Polysiloxane-urea Elastomers for Intraocular Lens Application

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Materials

Name	Company	Catalog Number	Comments
Octamethylcyclotetrasiloxane (D4), 97 %	ABCR GmbH	AB111277	presumably impairs fertility, must be degassed before use CAS: 556-67-2
1,3-Bis(3-aminopropyl)-tetramethyldisiloxane, 97%	ABCR GmbH	110832	sensitive to air, must be stored under nitrogen CAS: 2469-55-8
2,4,6,8-Tetramethyl-2,4,6,8-tetraphenylcyclotetrasiloxane	Sigma Aldrich	40094	technical grade CAS: 77-63-4
Tetramethylammonium hydroxide pentahydrate	Alfa Aesar	L09658	toxic if swallowed and upon skin contact, strong base, sensitive to air, hygroscopic, store under refrigeration and under nitrogen CAS: 10424-65-4
4,4'-Methylenbis(cyclohexylisocyanate) (H12MDI)	Covestro via CSC Jäkle Chemie GmbH & Co. KG		toxic if inhaled, skin and eye irritant CAS: 5124-30-1
Tetrahydrofuran (anhydrous) 99.8 %	Alfa Aesar	44608	stabilized with BHT CAS: 109-99-9
Chloroform 99 %	Grüssing GmbH Analytica	1025125000	stabilized with ethanol, presumably carcinogenic, can impair fertility and cause damage to an unborn child CAS: 67-66-3
Chloroform-d, 99.8 %	Sigma Aldrich	151823	CAS: 865-49-6
Dulbecco's modified Eagle's medium (DMEM) high glucose	Thermo Fisher Scientific Life Technologies GmbH	41965-039	
Fetal bovine serum (FBS)	Thermo Fisher Scientific Life Technologies GmbH	A3160801	
Trypsin/EDTA, 0.25 % phenol red	Thermo Fisher Scientific Life Technologies GmbH	25200056	
Cell Titer Aqueous One Solution cell proliferation assay (MTS)	Promega GmbH	G3580	
HaCaT-cells	CLS Cell Lines Service GmbH	300493	
BioComFold	Morcher GmbH		foldable accommodating intraocular lens
Accommodative 1CU	Human Optics AG		foldable accommodating intraocular lens

CrystaLens	Bausch and Lomb Inc.		foldable accommodating intraocular lens
Silmer OH-Di10	Siltech Corp.		Carbinol-terminated Polydimethylsiloxane
Synchrony	Visiogen Inc.		dual-optic foldable accommodating intraocular lens
Elast-Eon	AorTech International plc		thermoplastic PDMS-PHMO-based polyurethane for medical applications
Pellethane 2363-80A	Lubrizol Life Sciences		thermoplastic polyether-based polyurethane for medical applications
Zwick universal tensile testing machine model 81565 and software testXpert II	Zwick GmbH & Co. KG		tensile testing machine
CASY	Roche Innovatis AG		cell counting system
Multisizer	Beckman Coulter Life Sciences		cell counting system