

SUPPORTING INFORMATION

Thermoresponsive poly(ϵ -caprolactone)-poly(ethylene/propylene glycol) copolymers as injectable hydrogels for cell therapies

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Table S1: Comparison of theoretical and actual epoxide group integrals of the synthesised copolymers.

Copolymer	Theoretical Epoxide (CH) Integral	Actual Epoxide (CH) Integral	Reduction in Epoxide (%)
PCL-PEG	0.47	0.22	54
PEG ₁ PPG ₁	0.48	0.37	23
PEG ₁ PPG ₂	0.25	0.16	36
PEG ₁ PPG ₃	0.20	0.13	36
M _{0.7} PEG ₁ PPG ₂	0.22	0.11	51

Table S2: Summary of reagent quantities and results of the direct synthesis of the copolymers.

Designation	MPEG (g)	EPEG (g)	CL (g)	EPPG (g)	Tin(II) octoate (g)	Solvent Volume (mL)	Weight Average Molecular Weight (M_w)	Number Average Molecular Weight (M_n)	Z-Average Molecular Weight (M_z)	Dispersity ($\bar{D}$)	Reagent Molar Ratio (EPEG:EPPG)
PCL-PEG	2.184	6.116	11.116	7.815	0.172	5	5864	1219	12910	4.844	1:1
PEG ₁ PPG ₁	2.184	6.116	11.116	7.815	0.172	5	2067	739	3315	2.796	1:1
PEG ₁ PPG ₂	2.194	4.018	11.128	10.407	0.172	5	2001	706	3446	2.834	1:2
PEG ₁ PPG ₃	2.184	3.012	11.129	11.712	0.172	5	4472	1454	8730	3.076	1:3
M _{0.7} PEG ₁ PPG ₂	1.497	4.014	10.963	10.250	0.119	5	5428	1901	10053	2.855	1:2

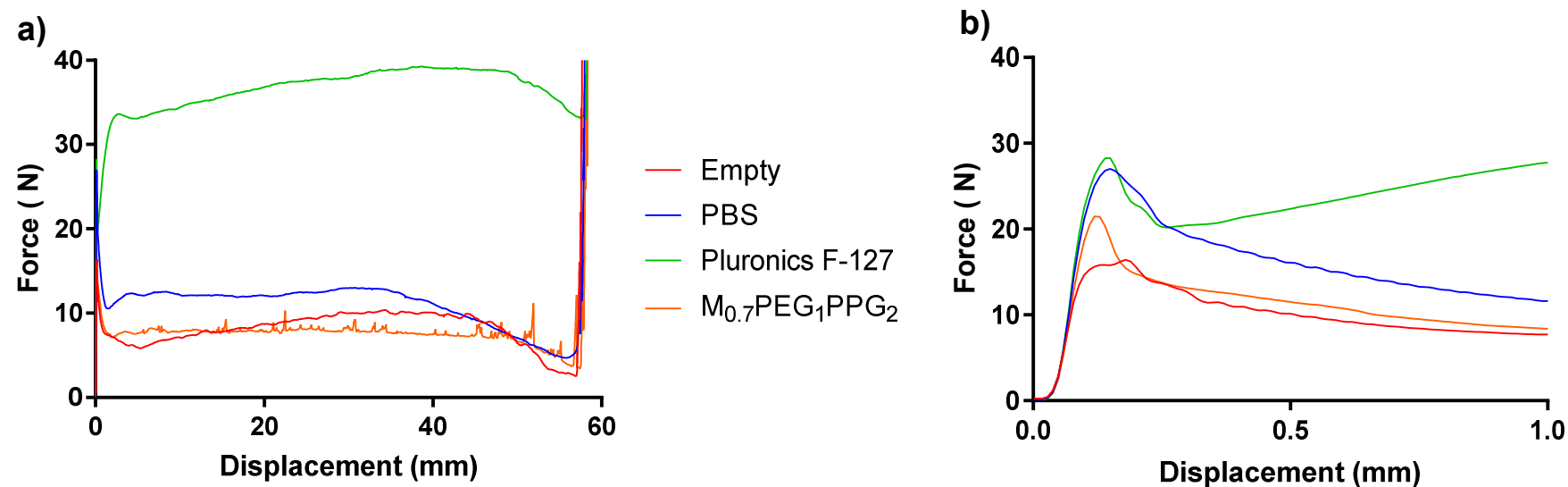


Figure S1. Injectability testing of formulations showing force versus displacement plots obtained from the injection of 1 mL of $M_{0.7}PEG_1PPG_2$ (10 wt% in PBS), Pluronic F127 (15.5 wt%, in PBS), PBS and an empty syringe, via a 1 mL disposable syringe fitted with a 25G needle: (a) details the entire measurement for each material ($n = 6$), and (b) highlights the region of the plunger-stopper break loose forces at approximately 0.15 mm.