

Supporting Information

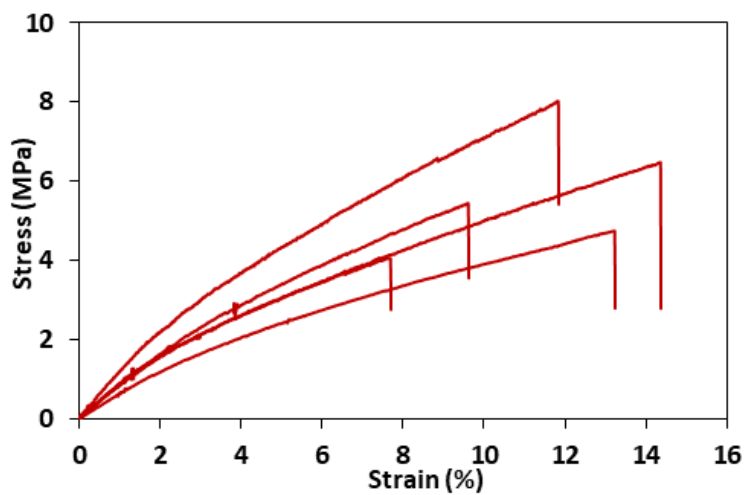


Figure S1. Tensile tests measurements from which average-values of Young's modulus, elongation at break and stress at break were calculated.

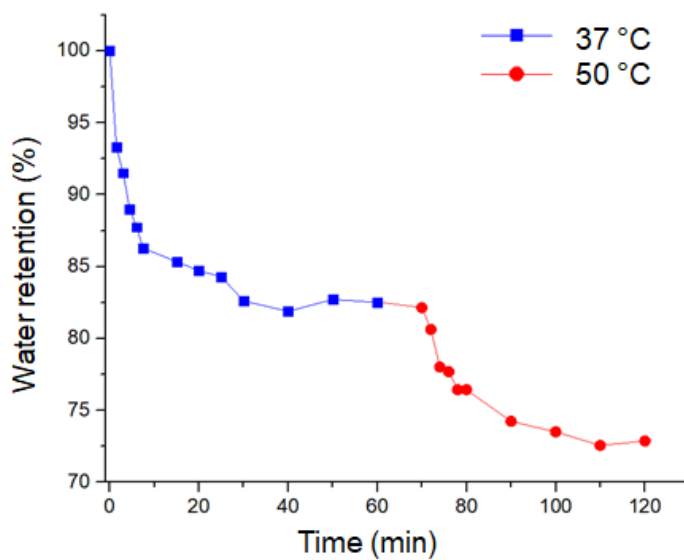


Figure S2. Deswelling experiment conducted at 37 and 50 °C, consecutively.

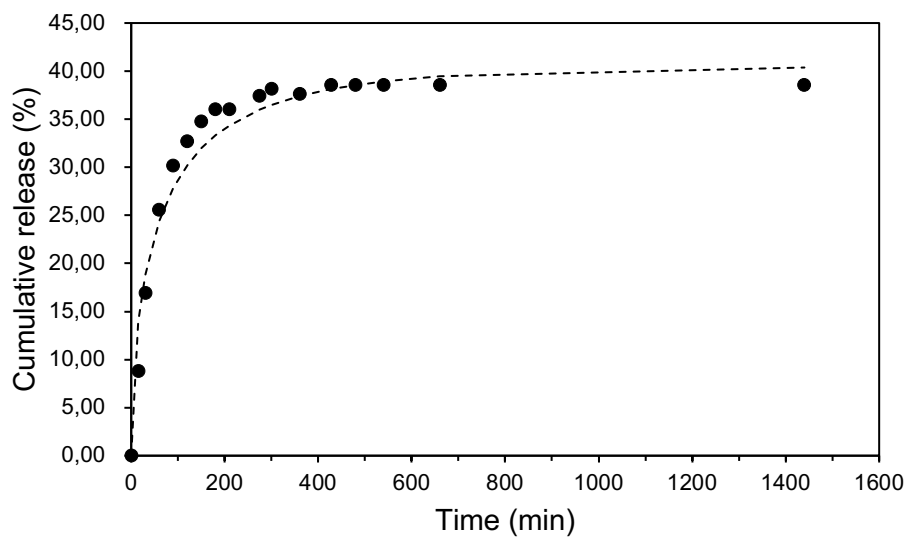


Figure S3. Cumulative DOX release profile over time at 37 °C (black filled dots) and Weibull fitting curve (dashed line).

Table S1. *In vitro* dissolution parameters for DOX release.

Equation	Correlation coefficient (R ²)	Constants (K)	Exponent
Peppas-Sahlin $\frac{M_t}{M_\infty} = K_1 \times t^m + K_2 t^{2m}$	0.97	K ₁ = 4.535 K ₂ = -0.122	m = 0.45
Weibull $\frac{M_t}{M_\infty} = \alpha \times (1 - \exp(-(kt^b)))$	0.98	α = 40.517 K = 11.131	b = 0.569
Korsmeyer-Peppas $\frac{M_t}{M_\infty} = K_{KP} \times t^n$	0.89	K _{KP} = 6.684	n = 0.291

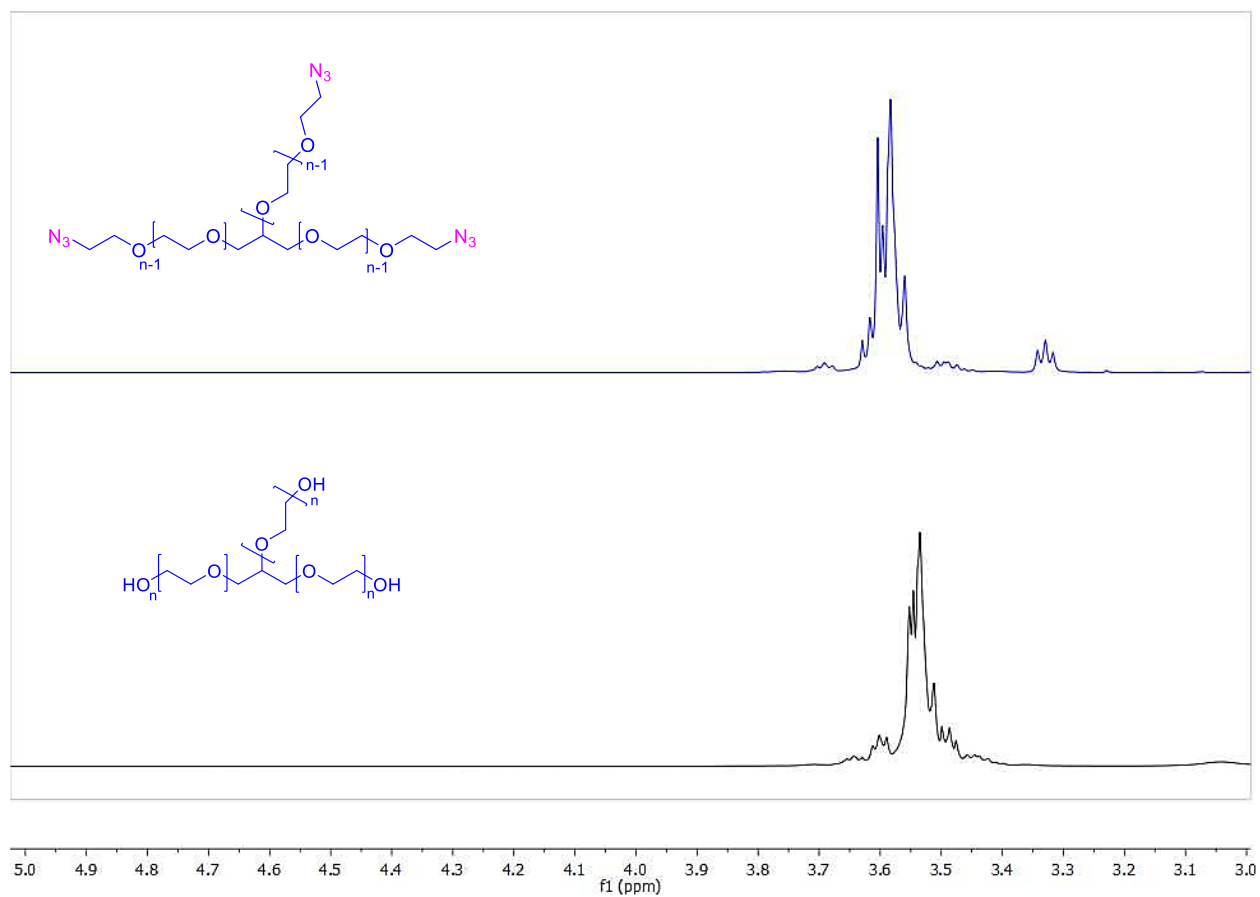


Figure S4. ¹H NMR spectra of triazide derivative of glycerol ethoxylate (**1a**) (*top*) and glycerol ethoxylate derivative (*bottom*) (solvent = CDCl₃).

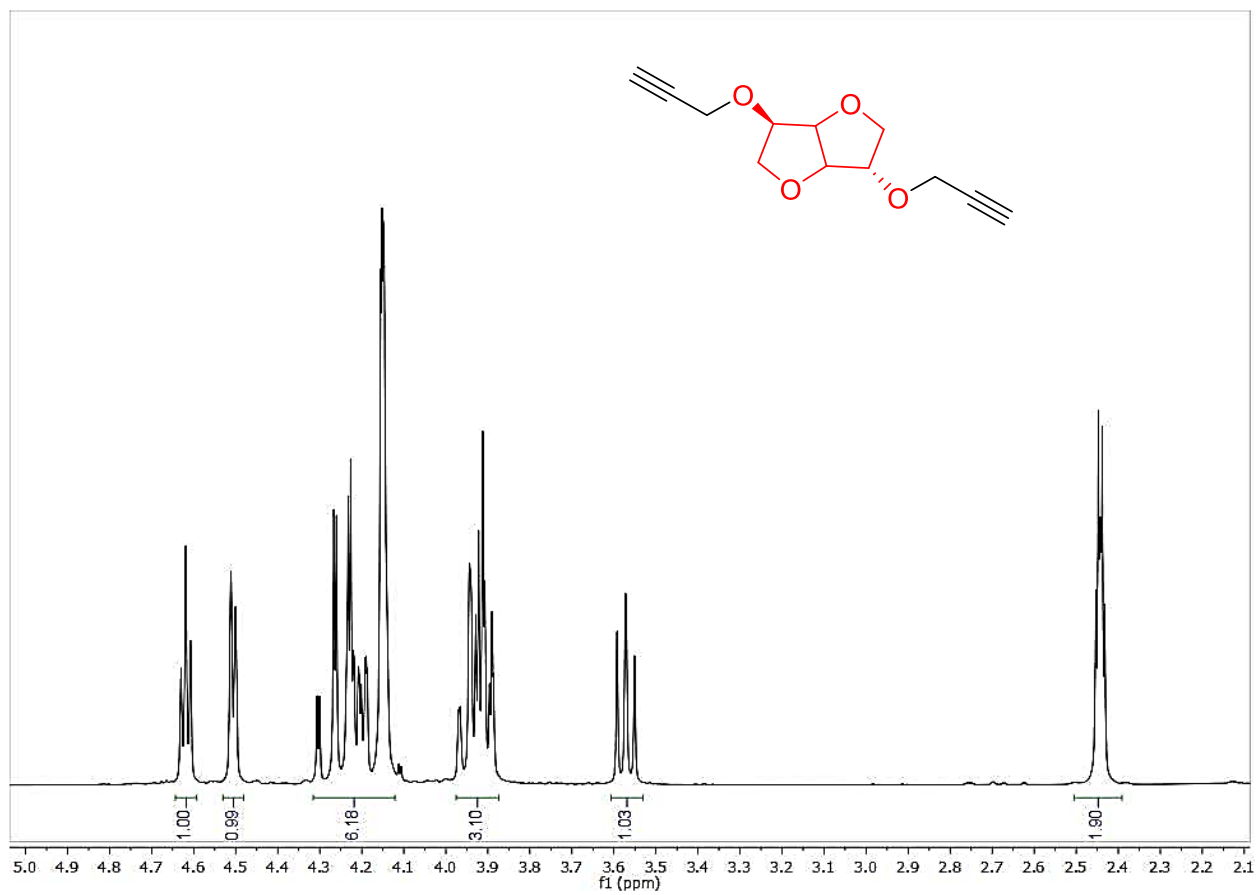


Figure S5. ¹H NMR spectrum of bis(alkyne) isosorbide (**1b**) (solvent = CDCl₃).

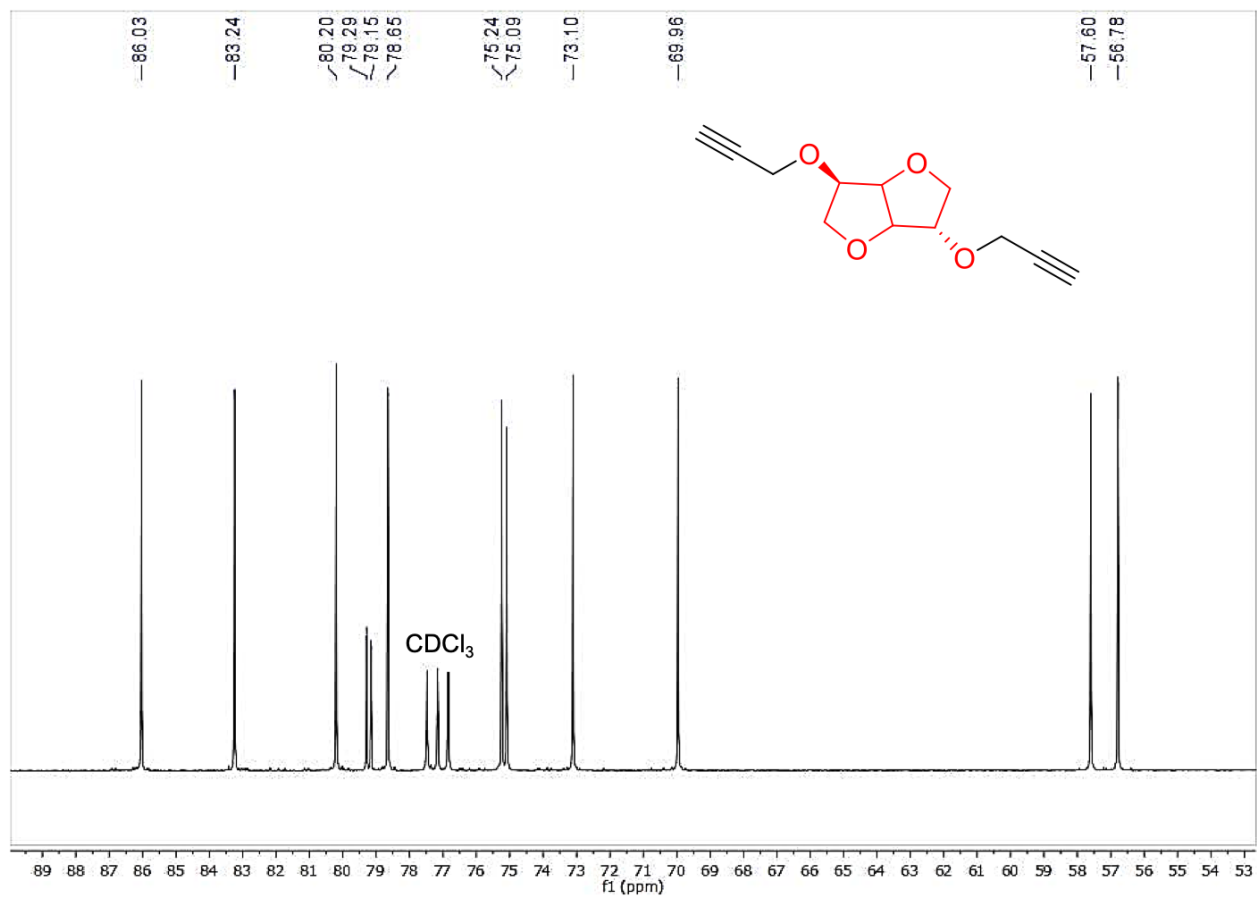


Figure S6. ^{13}C NMR spectrum bis(alkyne) isosorbide (**1b**) (solvent = CDCl_3).