

Supporting Information

Facile modification and fixation of a diaryl disulphide-containing dynamic covalent polyester by iodine-catalysed insertion-like addition reactions of styrene derivatives to disulphide units

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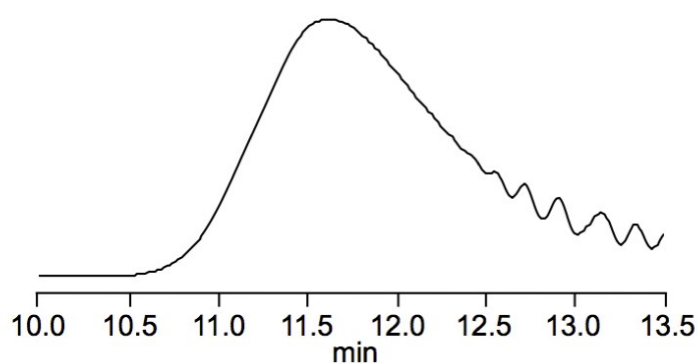


Figure S1 GPC chart of DADS-PEs.

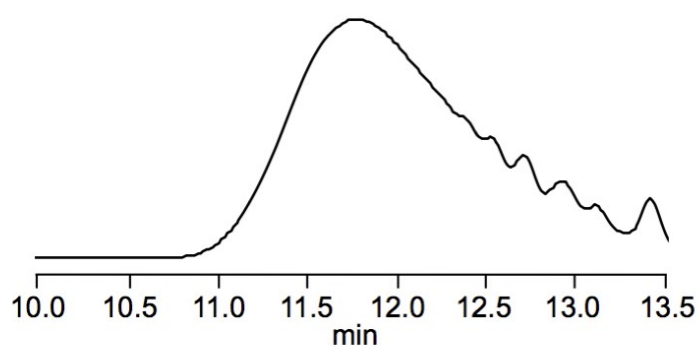


Figure S2 GPC chart of DADS-StH-PEs.

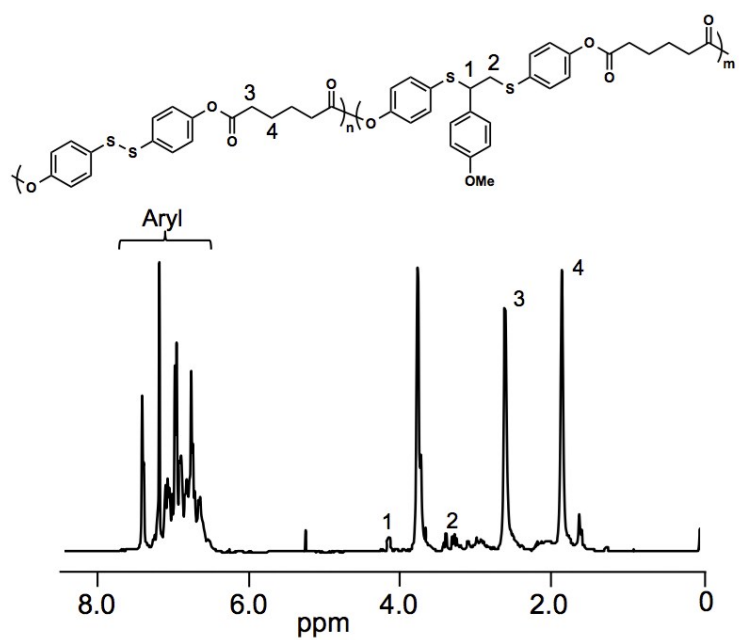


Fig. S3 ¹H NMR spectrum of DPDS-StOMe-PEs in CDCl₃.

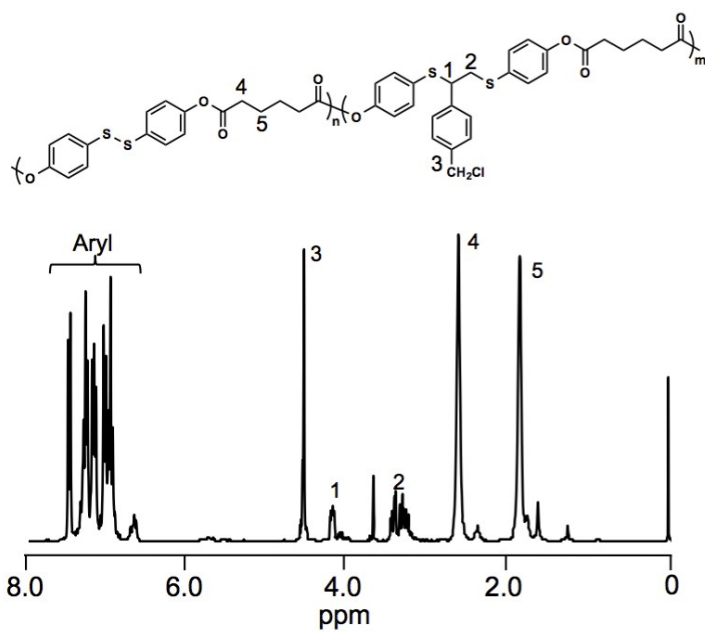


Fig. S4 ¹H NMR spectrum of DPDS-StCH₂Cl-PEs in CDCl₃.

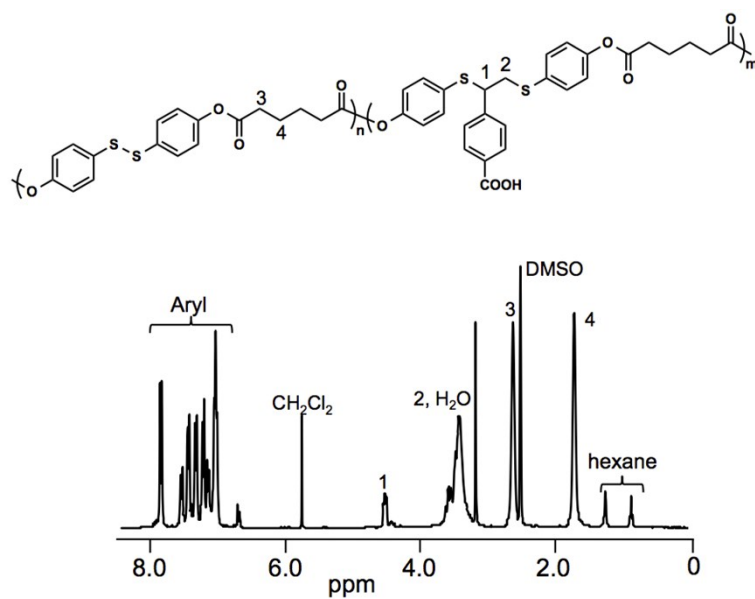


Fig. S5 ¹H NMR spectrum of DPDS-StCOOH-PEs in DMSO-*d*₆.

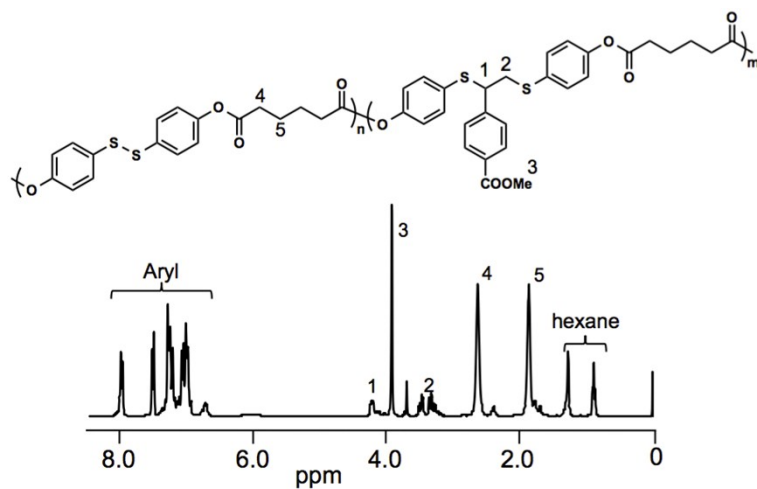


Fig. S6 ^1H NMR spectrum of DPDS-StCOOMe-PEs in CDCl_3 .

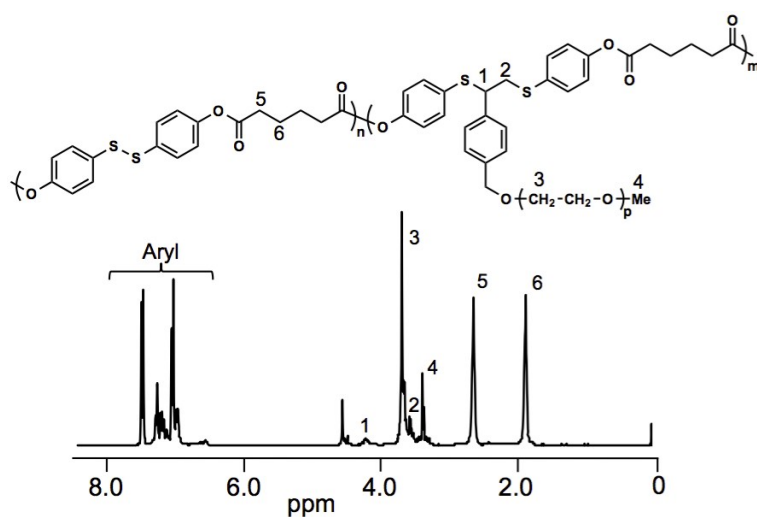


Fig. S7 ^1H NMR spectrum of DPDS-St220PEG-PEs in CDCl_3 .

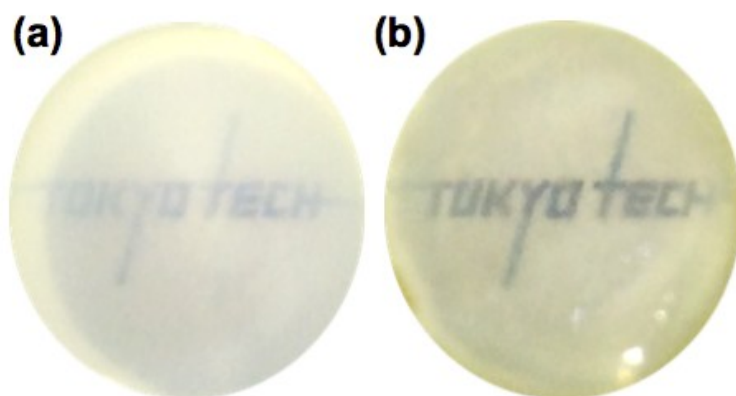


Fig. S8 The photographs of the films of (a) DADS-PEs and (b) DADS-StCOOMe-PEs.

Table S1. The solubility of the polyester before and after the addition reaction to each styrene derivative

□□□R Solvent	DADS-PEs	Substituent on styrene moieties after the addition reaction					
		H	OMe	CH ₂ Cl	4EG	COOMe	COOH
CHCl ₃	++	++	++	++	++	++	-
Acetone	-	-	++	+	+	-	++
THF	+	+	++	++	++	++	++
DMF	+	+	++	++	++	++	++

□□-: Insoluble. +: Soluble at elevated temperature. ++: Soluble at room temperature.