Electronic supplementary information (ESI)

1. Materials

Pluronic F127 [$(PEG)_{99}$-$(PPG)_{69}$-$(PEG)_{99}$], *p*-nitrophenyl chloroformate (*p*-NPC) (96.0 %), and basic Al_2O_3 (Standard Grade, 150 mesh, 58 Å) were purchased from Sigma Aldrich. Diethylenetriamine (DETA), triethylenetetramine (TETA) and triethylamine (TEA) were obtained from Tokyo Chemical Industry (TCI). Methylene chloride, DETA, TETA and TEA were dried over calcium hydride. Benzene was freshly distilled over sodium before use. All other chemicals are commercially available and were used as received.

2. Instruments

^{1}H-NMR analysis was performed using Bruker Advance 300 MHz spectrometer in D_2O or *d6*-DMSO at room temperature. Molecular weight and its distribution were measured by gel permeation chromatography (GPC) equipped with a refractive index detector (Shimadzu RID-10A refractometer) and Styragel HR 3, HR 4 and HR 4E columns in series using tetrahydrofuran (THF) with 0.1 w/w tetrabutylammonium bromide as an eluent. The flow rate was 1 mL/min and PEG standards with molecular weights ranged from 1.4 to 250 KDa were used for calibration. The dynamic modulus as

a function of temperature was measured by advanced rheometric extended systems (ARES, The Rheometric Science Inc., NI).

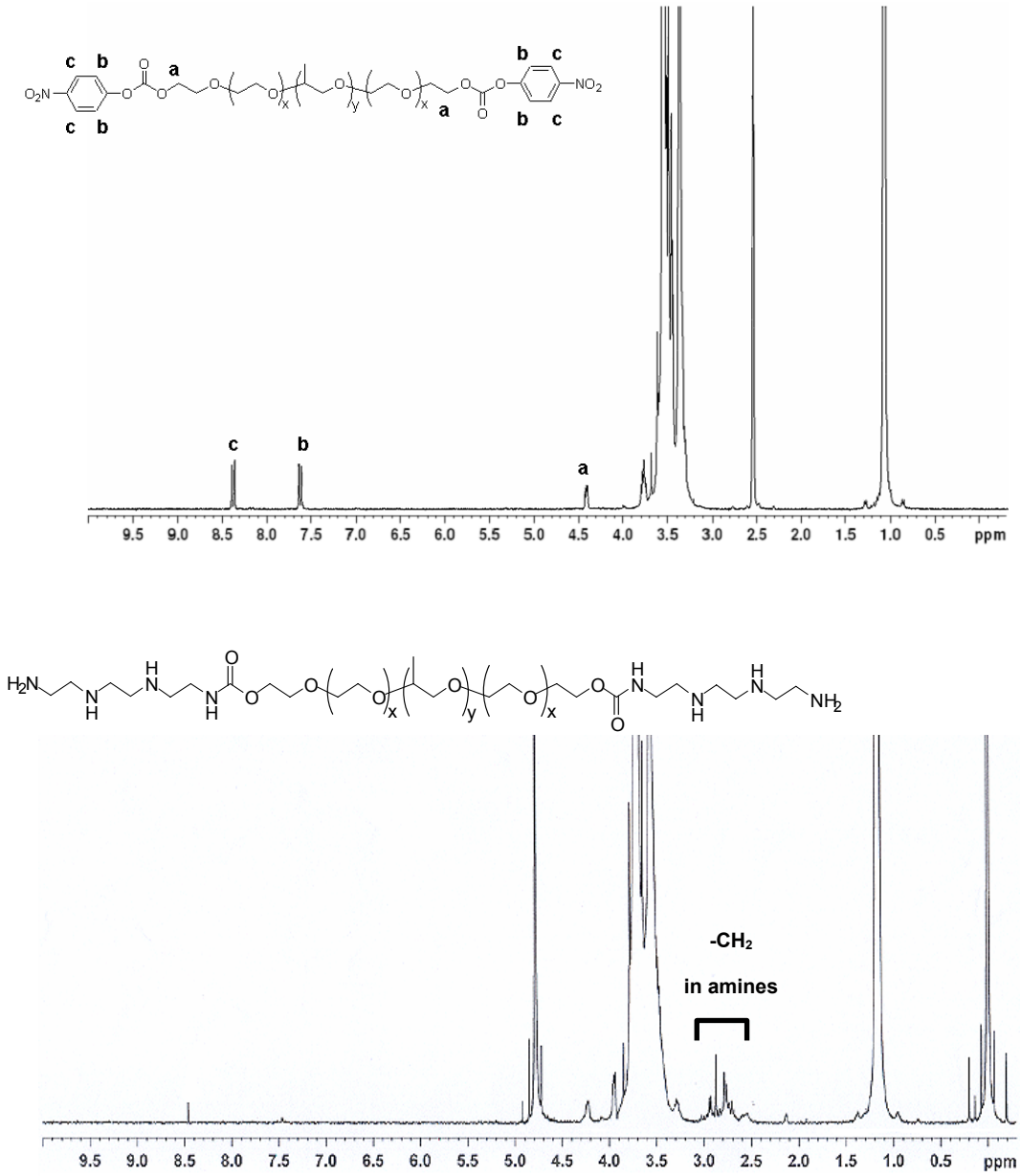

Fig. S1† ^{1}H-NMR spectra of (a) F127-NPC in DMSO-*d6* and (b) F127-TETA in D_2O.

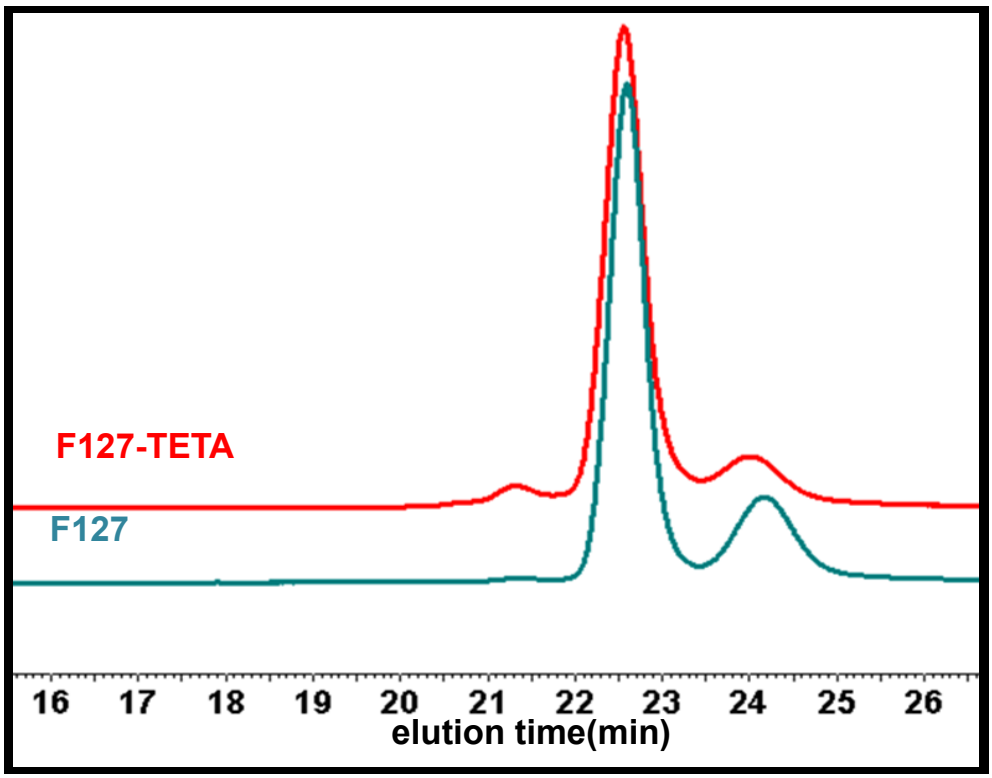

Fig. S2† Representative GPC traces of F127 and F127-TETA.