



4 H each, OCH<sub>2</sub>, H arom.); 8.91, 10.49 (both s, 2 H each, C(O)NH, N<sup>+</sup>H). IR,  $\nu/\text{cm}^{-1}$ : 1597 (C(O)N); 1627 (C(O)O); 2185 (CN); 2674 (N<sup>+</sup>H).

**Polymer 4b.** Under the above conditions, a light yellow powder (3.88 g, 88.2%) was obtained from cyanoacetate **1b** (1.57 g, 6.25 mmol), Et<sub>3</sub>N (1.73 mL, 12.5 mmol), and 1,4-phenylene-diisocyanate (1.0 g, 6.25 mmol);  $\eta_{\text{sp}}$  0.4 (1% solution in DMF). Found (%): C, 62.04; H, 8.14; N, 14.04. Calculated (%): C, 62.54; H, 8.14; N, 13.68. <sup>1</sup>H NMR,  $\delta$ : 1.16 (t, 18 H, CH<sub>3</sub>CH<sub>2</sub>N, <sup>3</sup>J<sub>H,H</sub> = 7.2 Hz); 1.36 (s, 4 H, OCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>); 3.10 (q, 12 H, CH<sub>3</sub>CH<sub>2</sub>N, <sup>3</sup>J<sub>H,H</sub> = 7.2 Hz); 3.35 (s, 4 H, OCH<sub>2</sub>CH<sub>2</sub>); 3.95 (t, 4 H, OCH<sub>2</sub>, <sup>3</sup>J<sub>H,H</sub> = 6.2 Hz); 7.32 (s, 4 H, H arom.); 8.91, 10.48 (both s, 2 H each, C(O)NH, N<sup>+</sup>H). IR,  $\nu/\text{cm}^{-1}$ : 1598 (C(O)N); 1633 (C(O)O); 2179 (CN); 2687 (N<sup>+</sup>H); 3196 (NH).

**Polymer 5.** A solution of 35% HCl (0.5 mL) in 5 mL of water was added to a solution of salt **4b** (2 g) in 20 mL of MeCN—water (1 : 1). The reaction mixture was stirred for 2 h. The precipitate was filtered off, washed with acetone, and kept *in vacuo* (50–60 °C, 1 Torr) for 2 h to a constant weight. The yield of the resulting colorless powder was 1.31 g (98%);  $\eta_{\text{sp}}$  0.20 (1% solution in DMF). Found (%): C, 58.41; H, 5.20; N, 13.53. Calculated (%): C, 58.25; H, 4.85; N, 13.59. <sup>1</sup>H NMR,  $\delta$ : 1.33, 1.57,

4.10 (all m, 4 H each, OCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>, OCH<sub>2</sub>CH<sub>2</sub>, OCH<sub>2</sub>); 4.90 (br.s, 2 H, CH,  $\Delta\nu$  = 120 Hz); 7.45 (s, 4 H, H arom.); 10.66 (s, 2 H, NH). IR,  $\nu/\text{cm}^{-1}$ : 1642 (C(O)N); 1750 (C(O)O); 2210 (CN); 3193 (NH).

The thermomechanical properties and molecular weights of all polymers will be reported elsewhere.

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## References

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