

Supporting Information

for

Oligomeric epoxide–amine adducts based on 2-amino-*N*-isopropylacetamide and α -amino- ϵ -caprolactam: Solubility in presence of cyclodextrin and curing properties

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Additional ¹H-¹H-ROESY spectra, FTIR spectra and DLS data

Content:

- ¹H-¹H-ROESY of oligomer **9** in presence of RAMEB-CD
- ¹H-¹H-ROESY of oligomer **10** in presence of RAMEB-CD
- Extended FTIR analysis of the curing of **5** and **8**
- FTIR analysis of the curing of **7** and **8**
- Determination of the hydrodynamic diameter of **9**
- Determination of the hydrodynamic diameter of **10**
- Hysteretic effect of **10** in aqueous RAMEB-CD solution

^1H - ^1H -ROESY of oligomer **9 in presence of RAMEB-CD:**

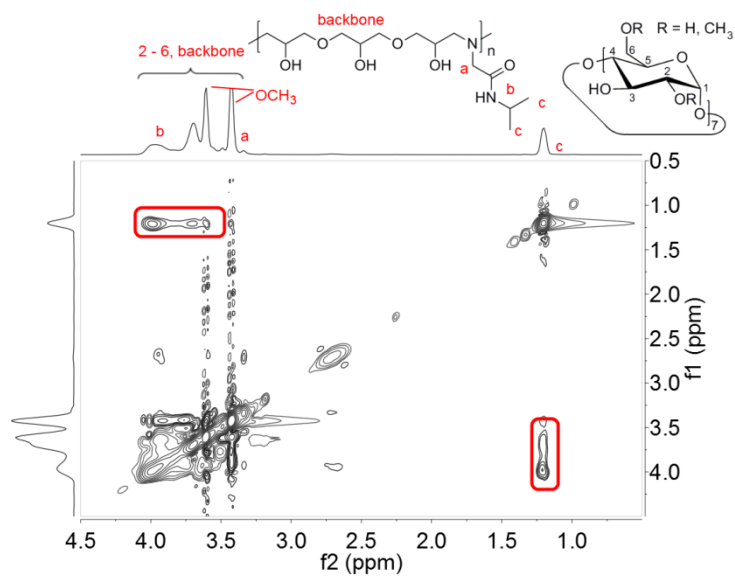


Figure S1: 2D NMR ROESY (300 MHz, D₂O) spectrum of the complex of **9** with RAMEB-CD, displaying the correlation of the protons at 1.1 ppm and the protons in the region of 3.3–4.1 ppm.

^1H - ^1H -ROESY of oligomer **10 in presence of RAMEB-CD:**

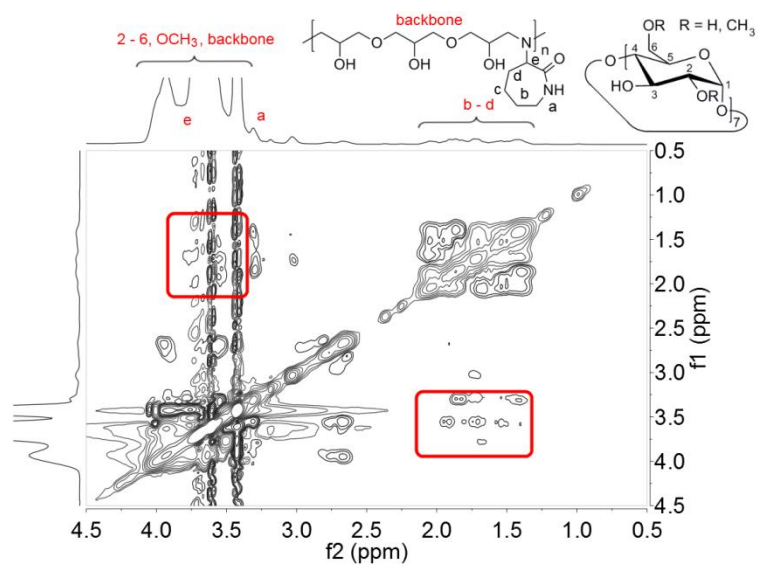


Figure S2: 2D NMR ROESY (300 MHz, D₂O) spectrum of the complex of **10** with RAMEB-CD, displaying the correlation of the protons in the region of 1.1–2.0 ppm and the protons in the region of 3.3–4.1 ppm.

Extended FTIR analysis of the curing of 5 and 8:

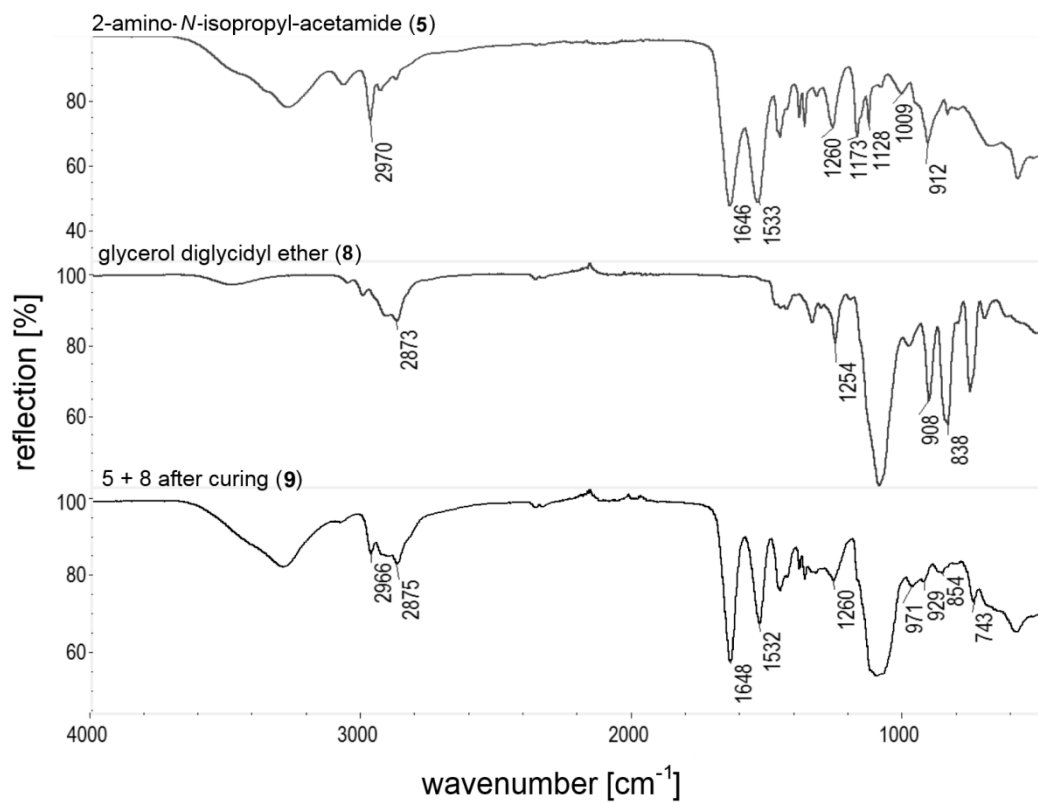


Figure S3: Comparison of the FTIR spectra of the monomers **5** and **8**, as well as the resulting adduct **9** after curing.

FTIR analysis of the curing of 7 and 8:

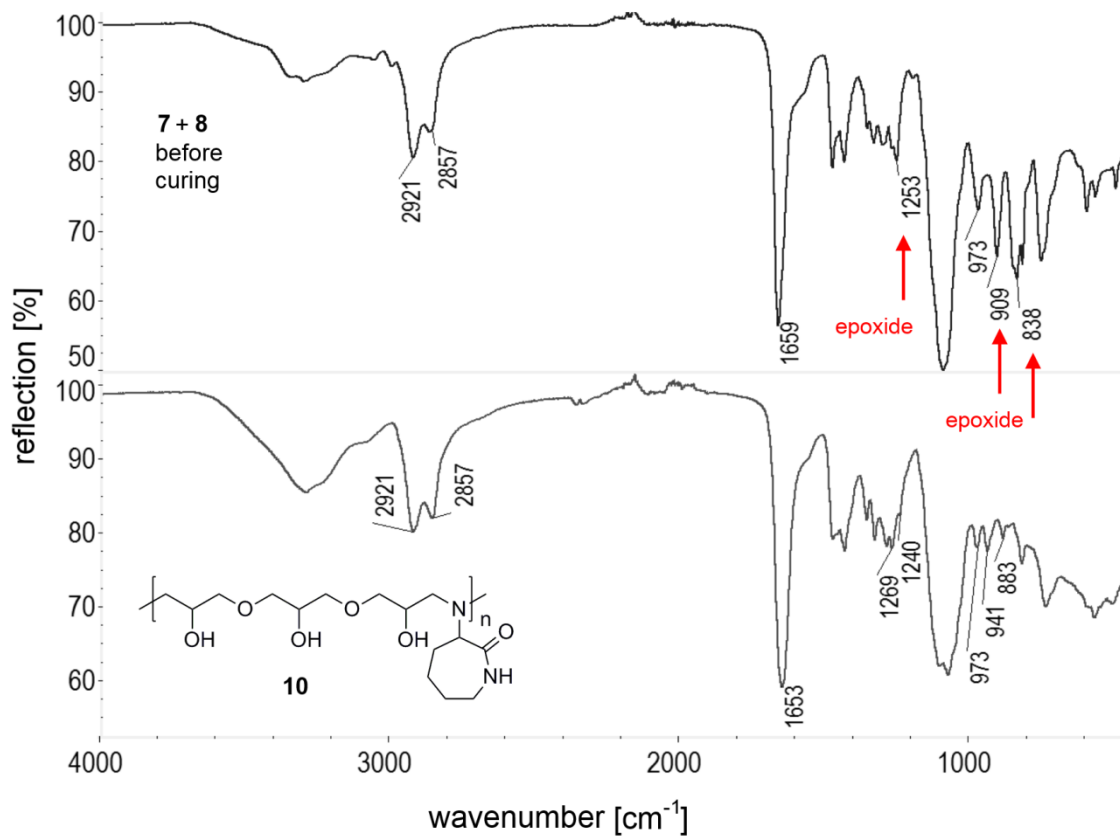


Figure S4: Comparison of the FTIR spectra of the monomer mixture of **7** and **8** and the oligomer **10** after curing.

Determination of the hydrodynamic diameter of **9**:

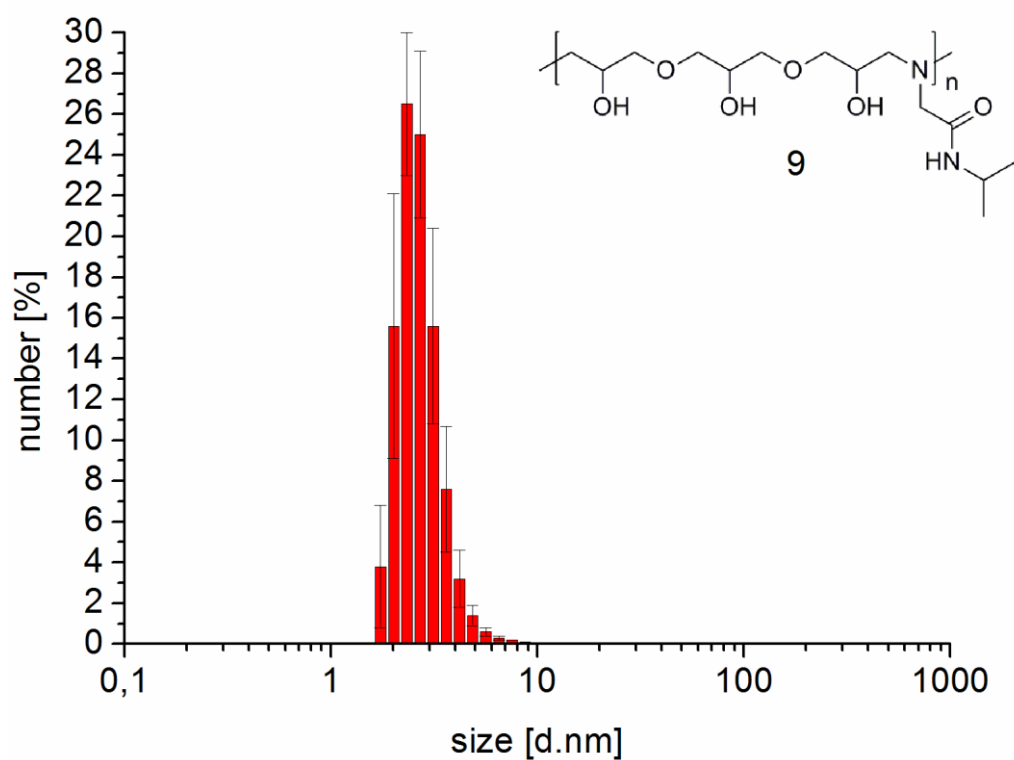


Figure S5: Mean hydrodynamic diameters of **9** in water (1.5 mg/mL) at 20 °C and standard deviation error bars.

Determination of the hydrodynamic diameter of **10**:

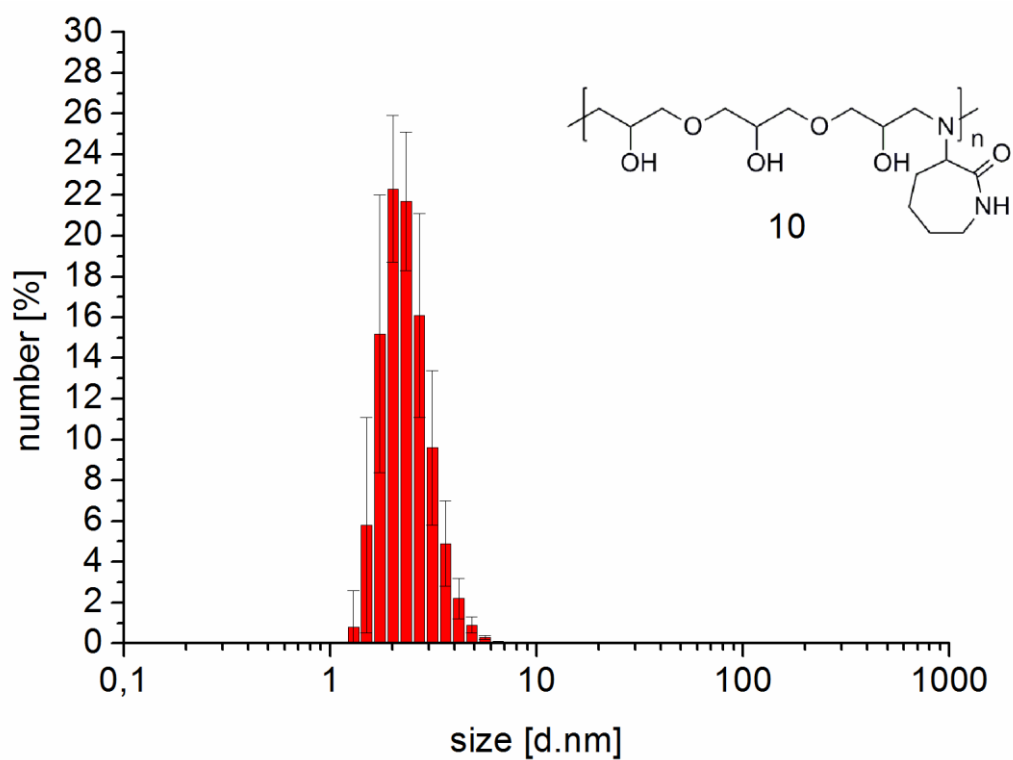


Figure S6: Mean hydrodynamic diameters of **10** in water (1.5 mg/mL) at 20 °C and standard deviation error bars.

Hysteretic effect of **10** in aqueous RAMEB-CD solution

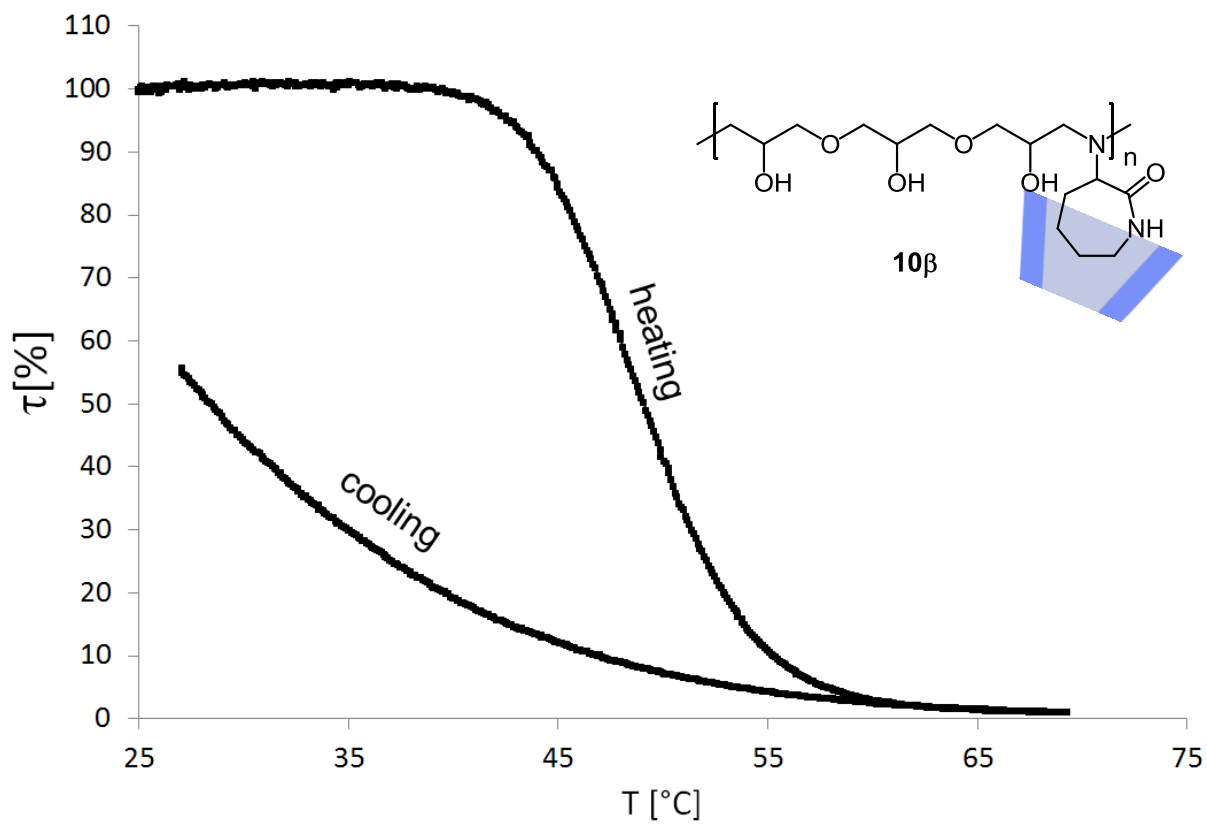


Figure S7: LCST measurements of **10** in aqueous RAMEB-CD solution with illustrated heating and cooling curve.