

**Supporting Information**

**for**

**Influence of cyclodextrin on the solubility and**

**the polymerization of (meth)acrylated**

**Triton<sup>®</sup> X-100**

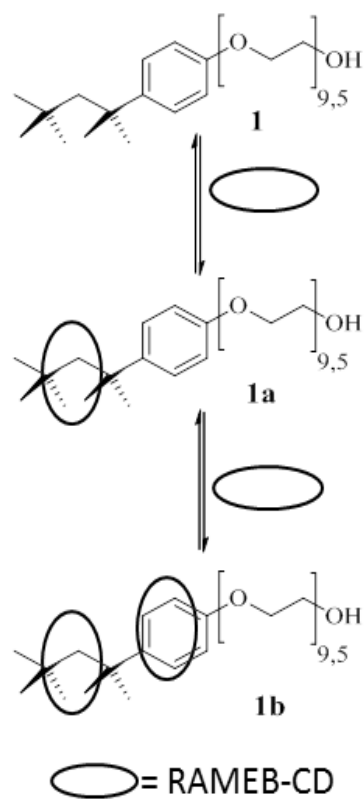
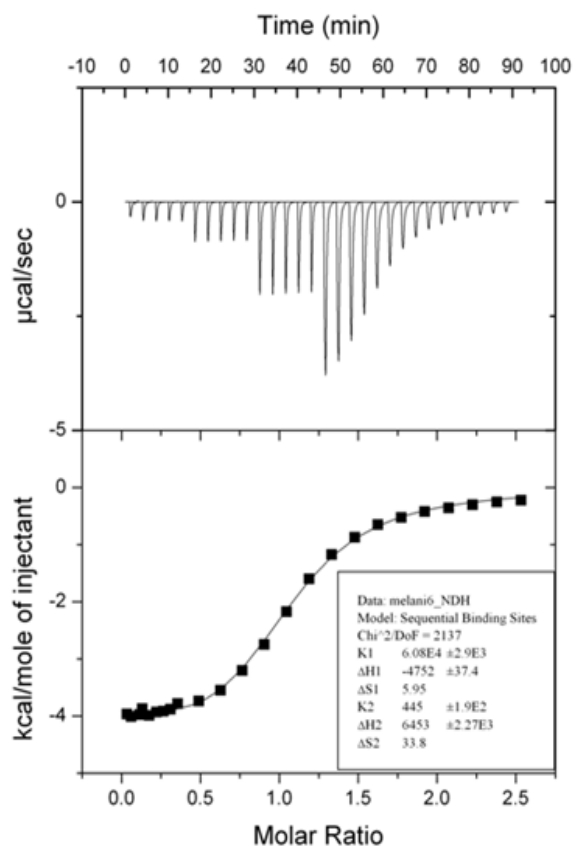
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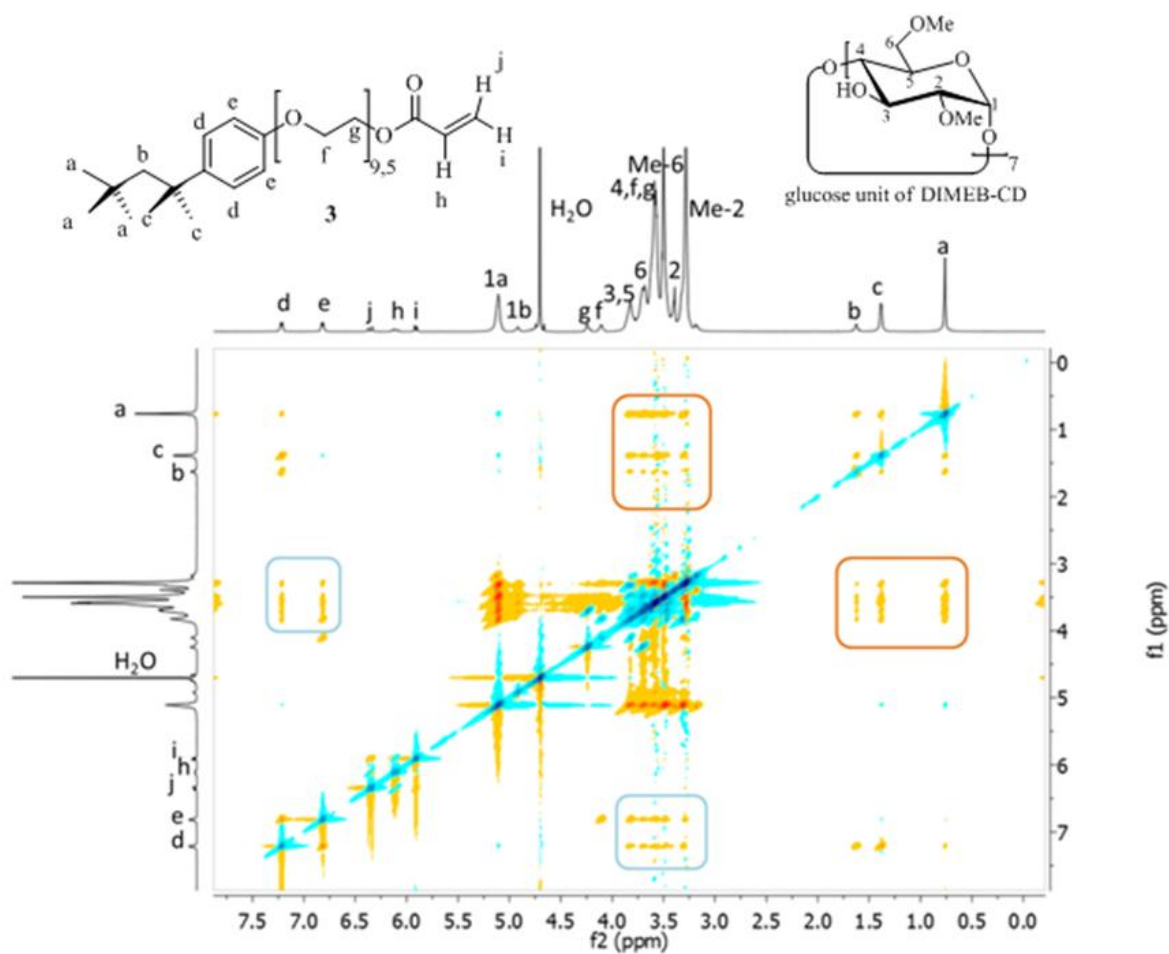
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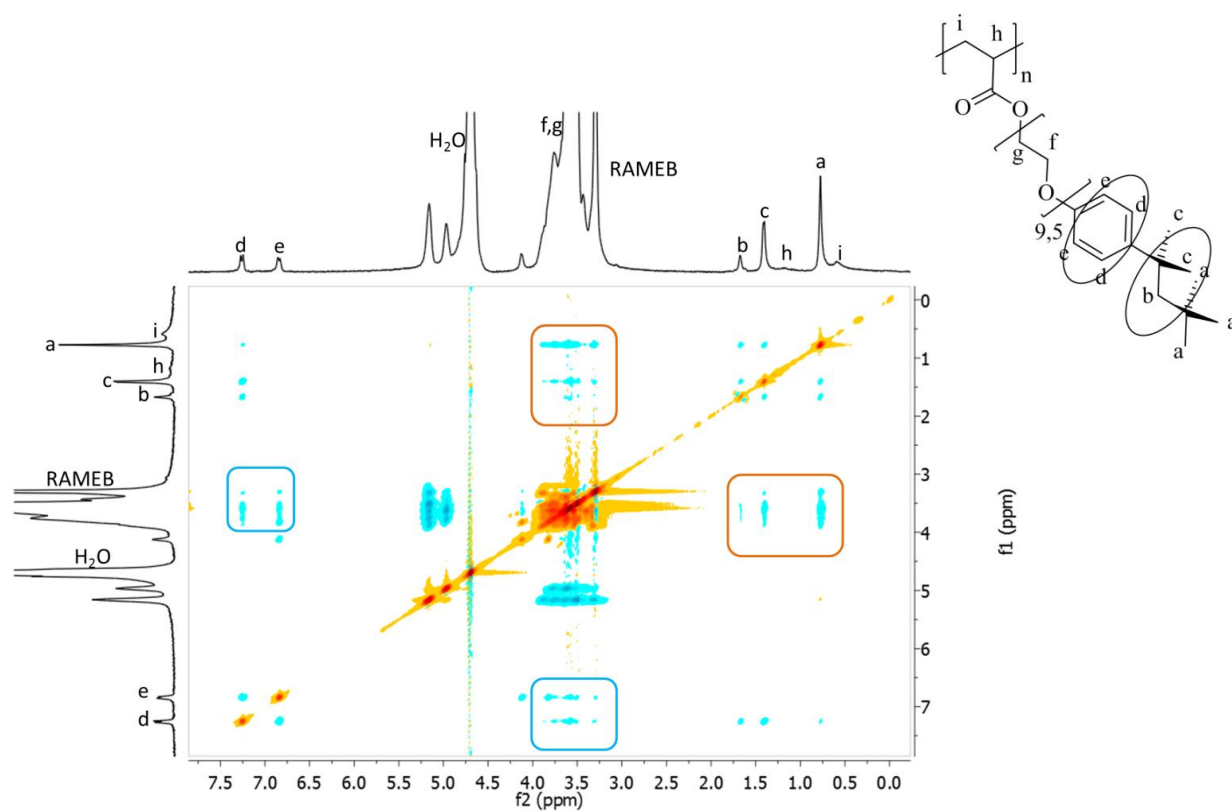
**Additional ITC results, 2D NMR ROESY and  
hydrodynamic diameters**



**Figure S1:** ITC result for a titration of a 2.5 mM solution of RAMEB-CD against a 0.2 mM solution of Triton<sup>®</sup> X-100 (**1**) in water.



**Figure S2:** 2D-NMR-ROESY spectrum of the complex between the acrylic monomer derived from Triton® 3 with 2 equiv of DIMEB-CD (300 MHz, D<sub>2</sub>O).



**Figure S3:** 2D-NMR-ROESY spectrum of the acrylic polymer with two equivalents RAMEB-CD **13** after its polymerization with VA-044 as radical initiator in water (300 MHz, D<sub>2</sub>O).

**Table S1:** The hydrodynamic diameters of the different polymers and their complexes with RAMEB-CD in DMF.

| compound                                    | hydrodynamic diameter (nm) in DMF |
|---|-----------------------------------|
| <b>8</b> + 1 equiv of RAMEB-CD <sup>a</sup> | 11.4                              |
| <b>10</b> <sup>b</sup>                      | 11.8                              |
| <b>8</b> + 2 equiv of RAMEB-CD <sup>a</sup> | 18.4                              |
| <b>11</b> <sup>b</sup>                      | 17.3                              |
| <b>9</b> + 1 equiv of RAMEB-CD <sup>a</sup> | 12.5                              |
| <b>12</b> <sup>b</sup>                      | 10.2                              |
| <b>9</b> + 2 equiv of RAMEB-CD <sup>a</sup> | 16.3                              |
| <b>13</b> <sup>b</sup>                      | 15.5                              |

<sup>a</sup>The polymers were homopolymerized in DMF and then complexed with equiv of RAMEB-CD.

<sup>b</sup>First the monomers were complexed with RAMEB-CD and then polymerized in water.