

## Supporting information for

### Physically-Crosslinked Fluorosilicone Elastomers Obtained by Self-Assembly and Template Polycondensation of Tailored Building Blocks

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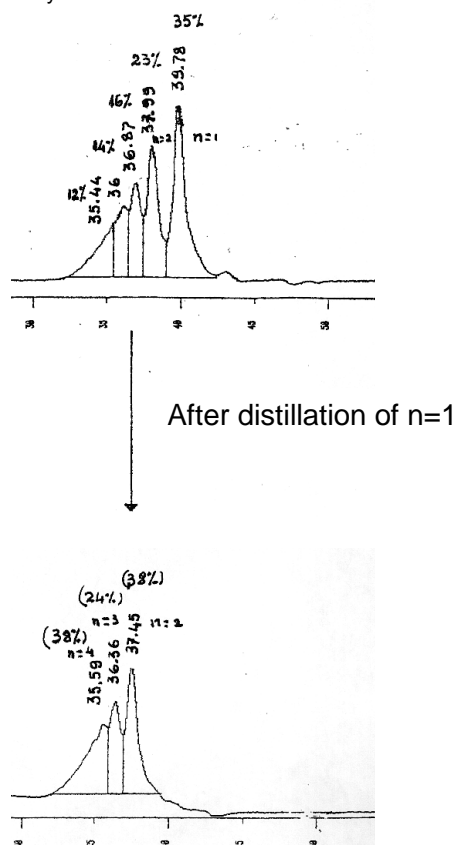


Figure S1: SEC analysis of the initial product of hydrosilylation (**I** in scheme 3, see experimental part in the main text), and removal of  $n=1$  by distillation, before hydrolysis step (see text for details).

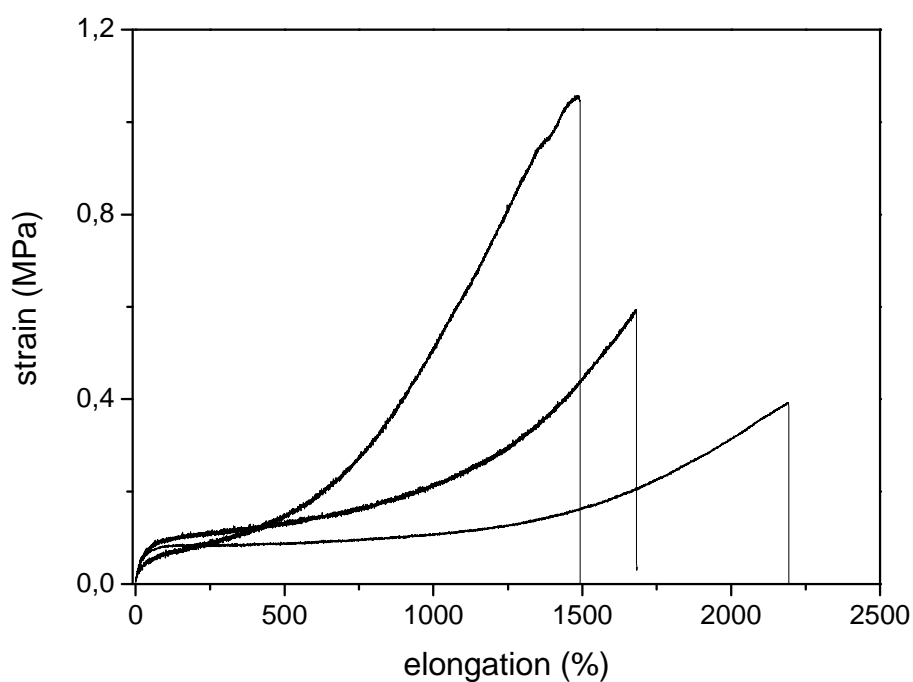


Figure S2: Strain-stress curves on three different unstretched test samples of **2'**.

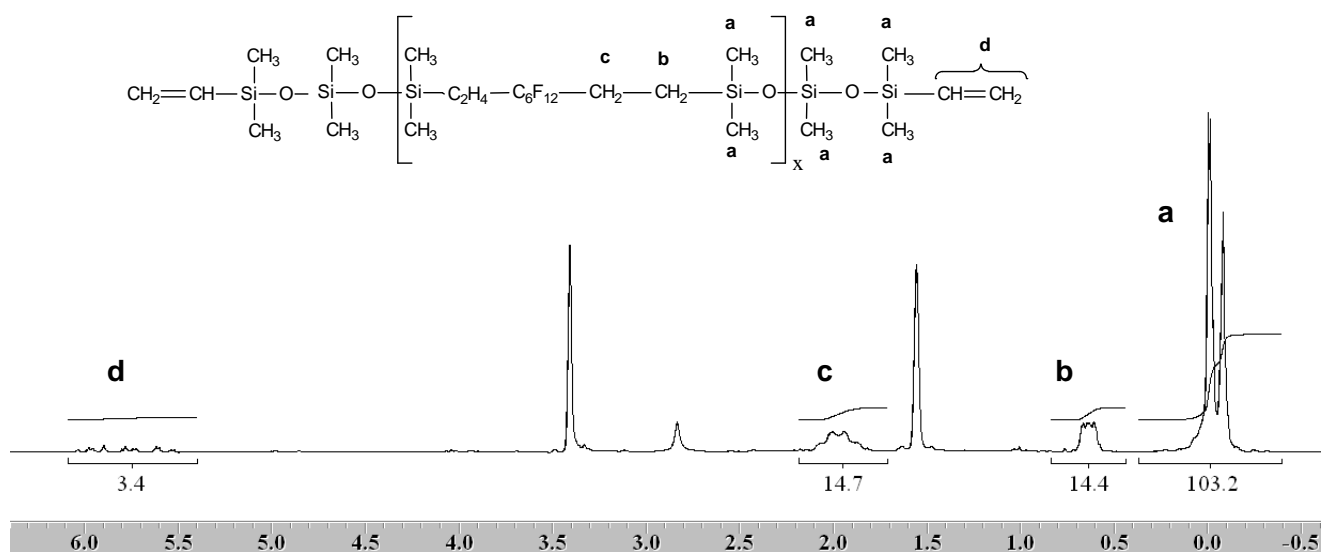


Figure S3:  $^1\text{H}$  NMR spectra of **1** end-capped with vinyltrimethylchlorosilane ( $\text{DP}_x = 1.6$ ).

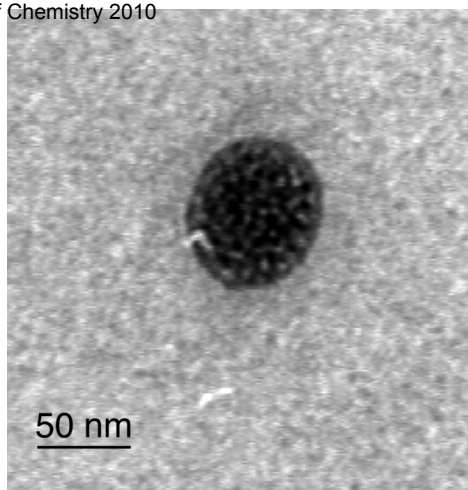


Figure S4: Zoom on the TEM photograph of a cluster in material 1'.

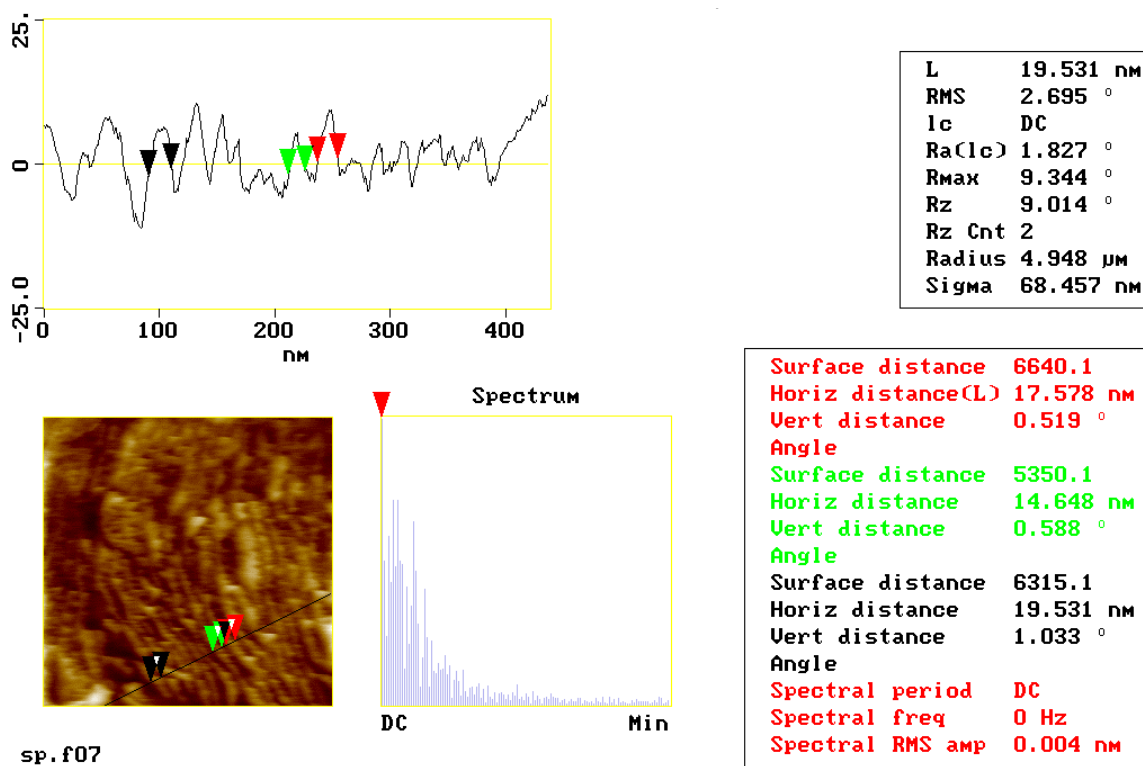


Figure S5: Detailed AFM analysis on the surface of sample 1'.

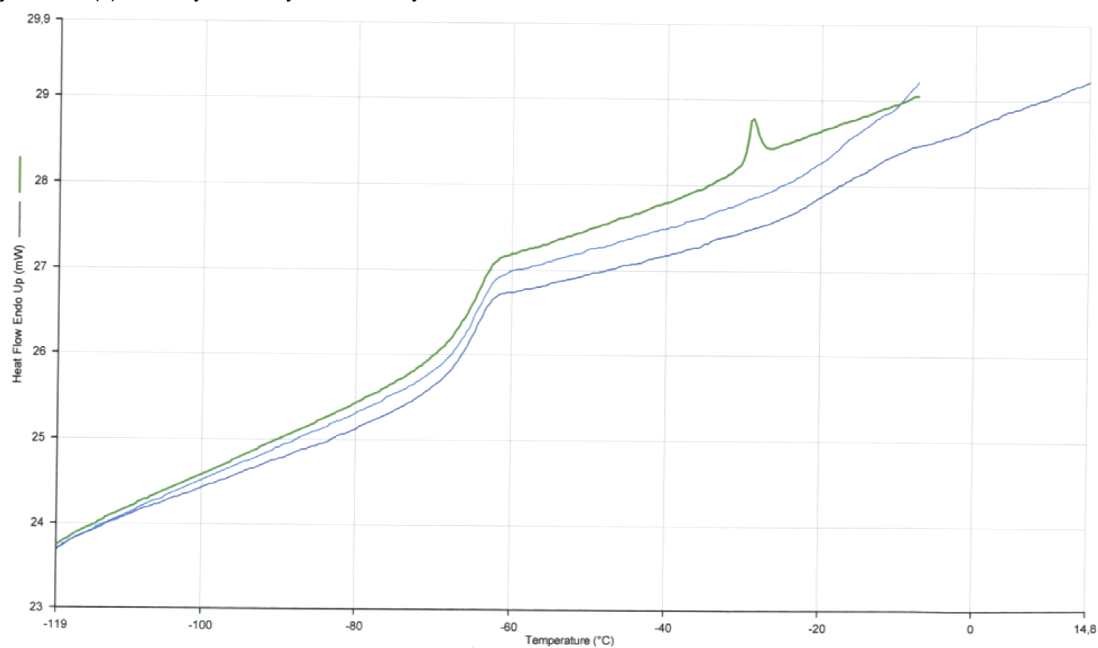


Figure S6: DSC traces of sample 1 using three rising temperature ramps (from top to bottom).

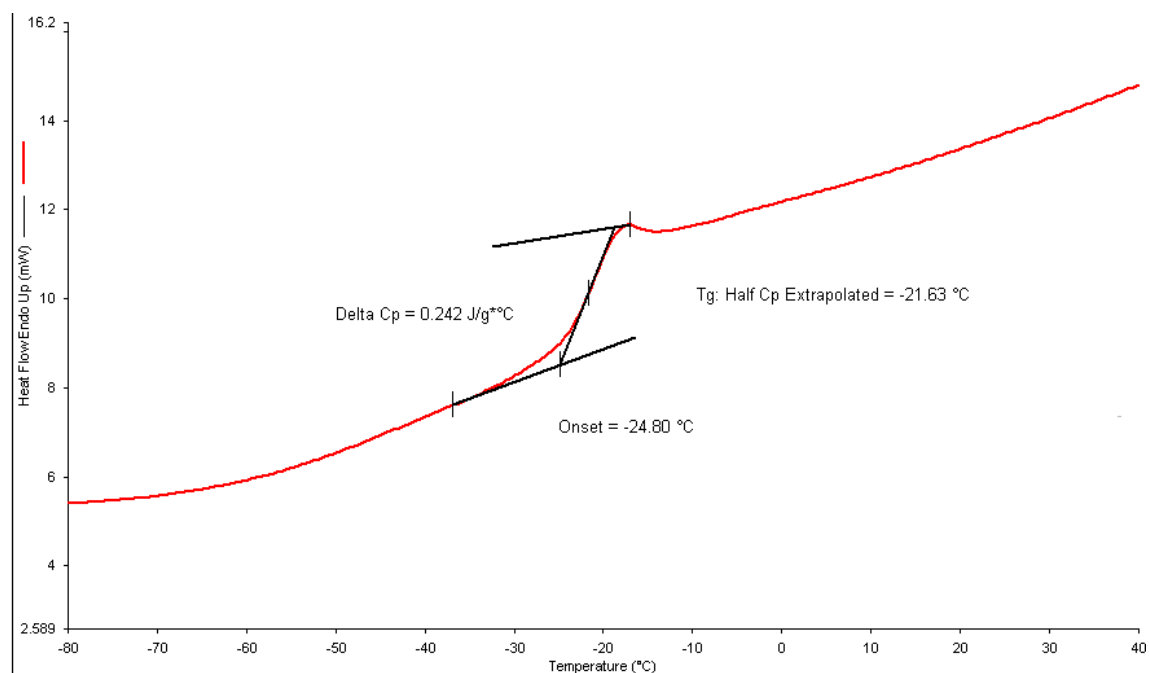


Figure S7: DSC trace of sample 2.

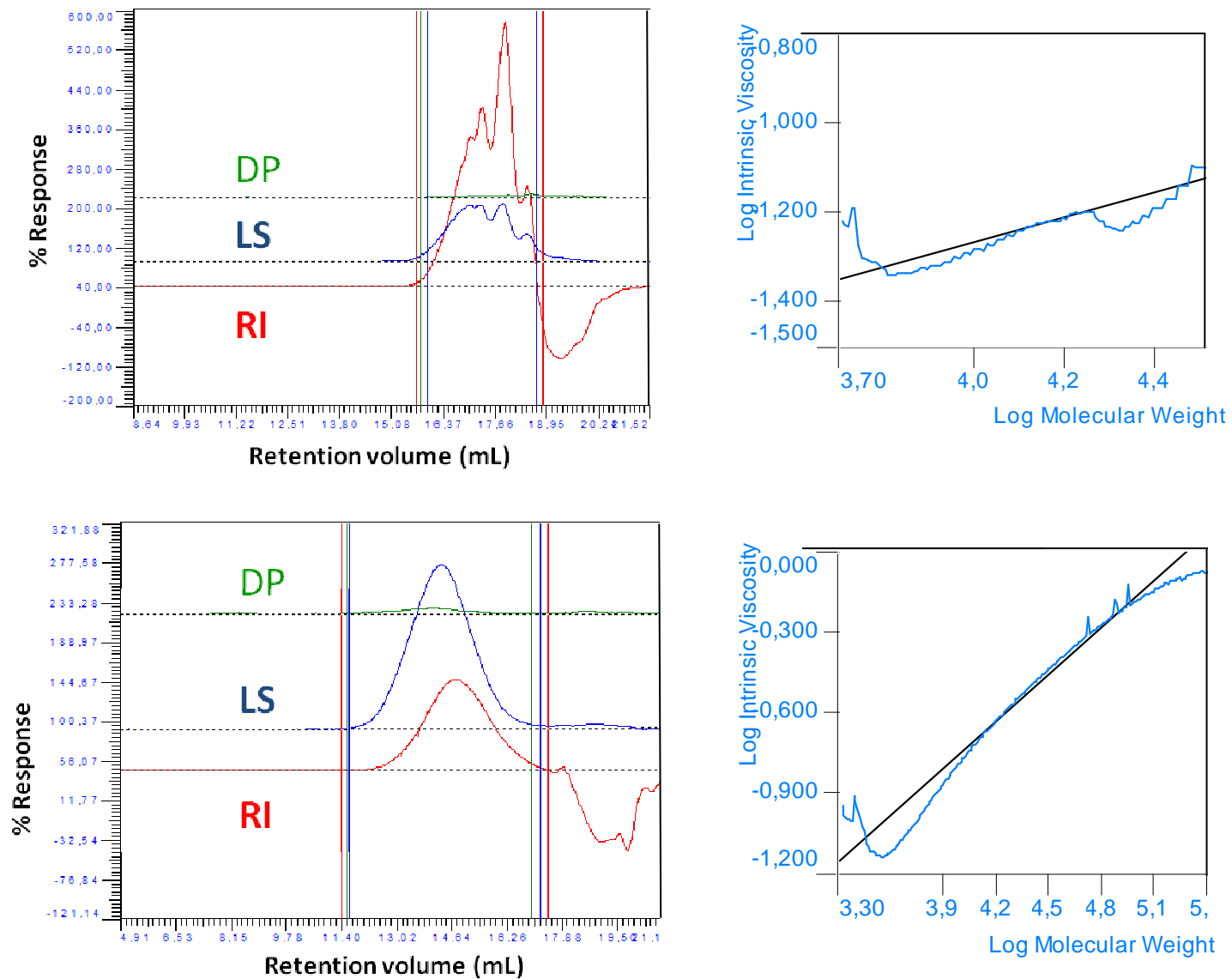


Figure S8: Triple detection SEC in toluene of dissolved materials **1'** (above) and **2'** (below).

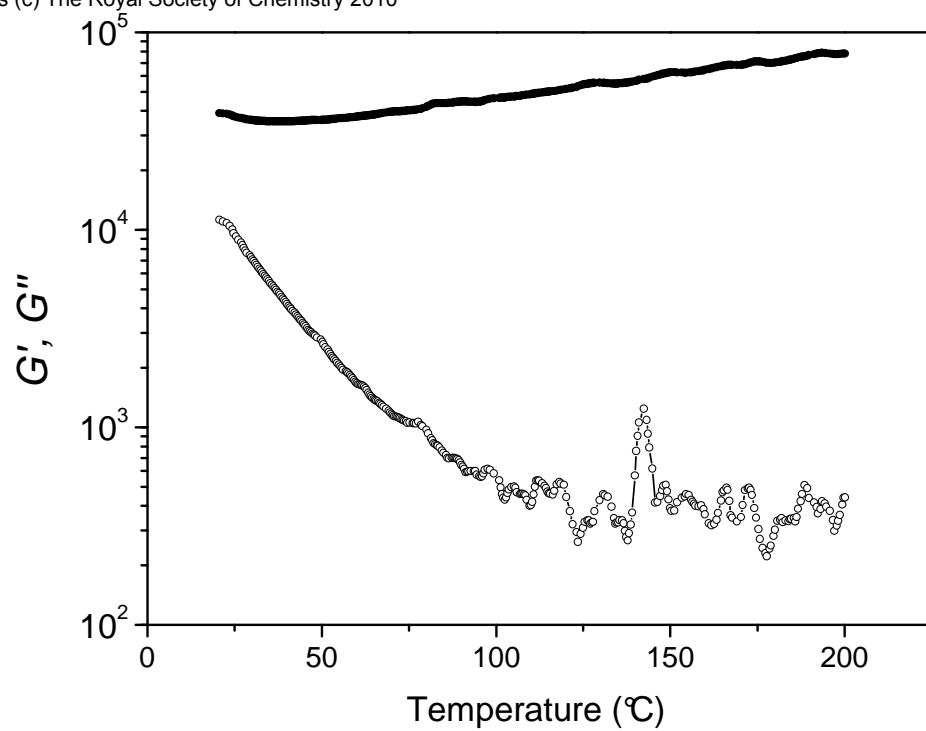


Figure S9:  $G'$  (full symbols) and  $G''$  (open symbols) versus temperature for material **2'**.