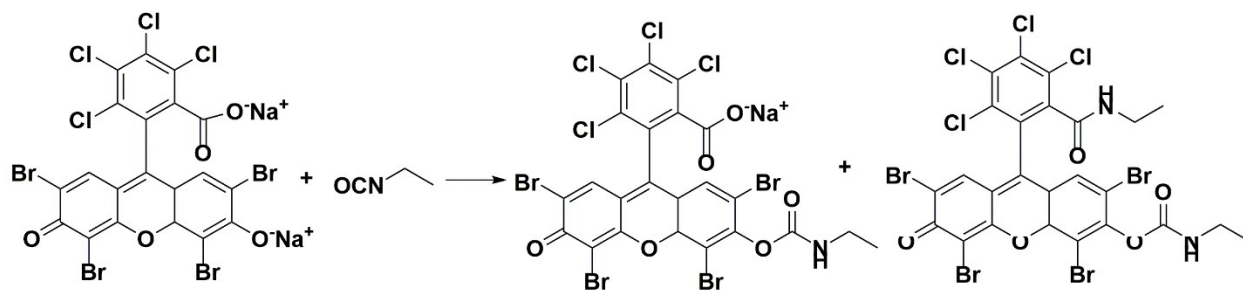
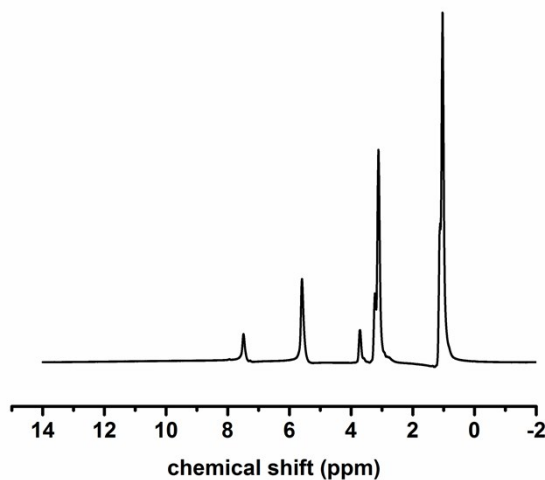


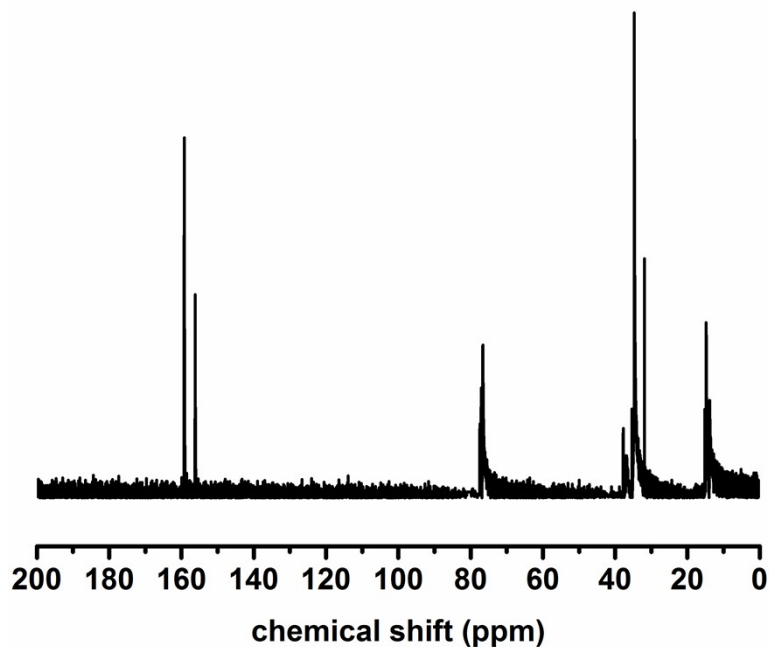
Fluorescence Paper Supplemental Materials



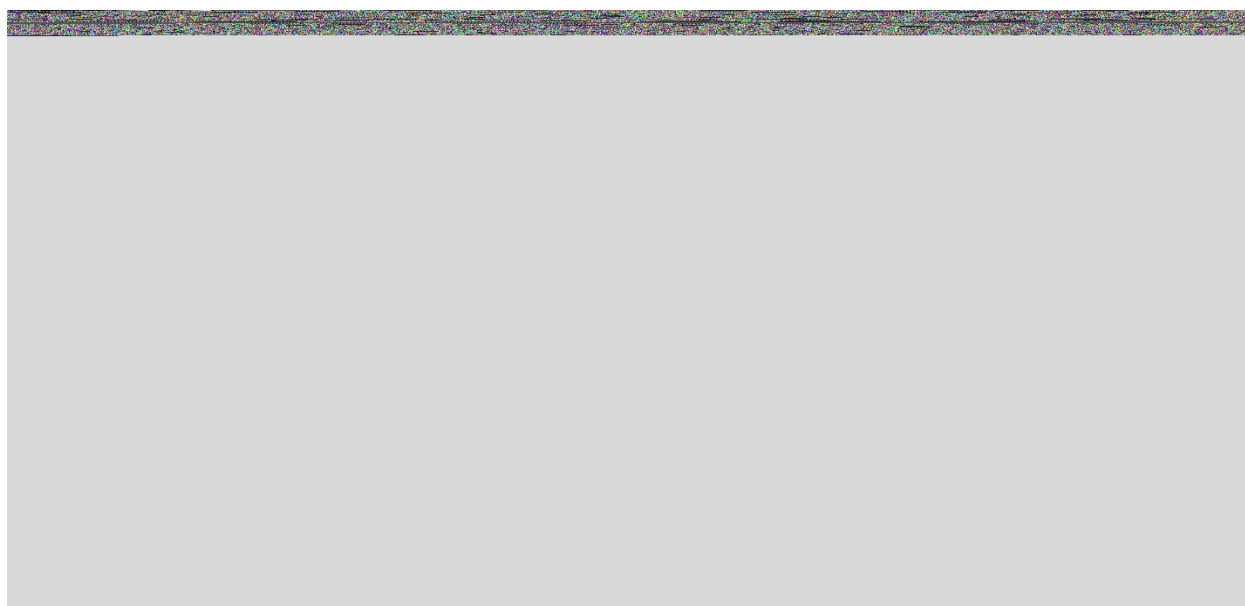
SI Figure a. Model reaction of ethyl isocyanate with indocyanine green (IcG), demonstrating the formation of the carbamate linkage, confirmed by ¹H and ¹³C NMR and MS.



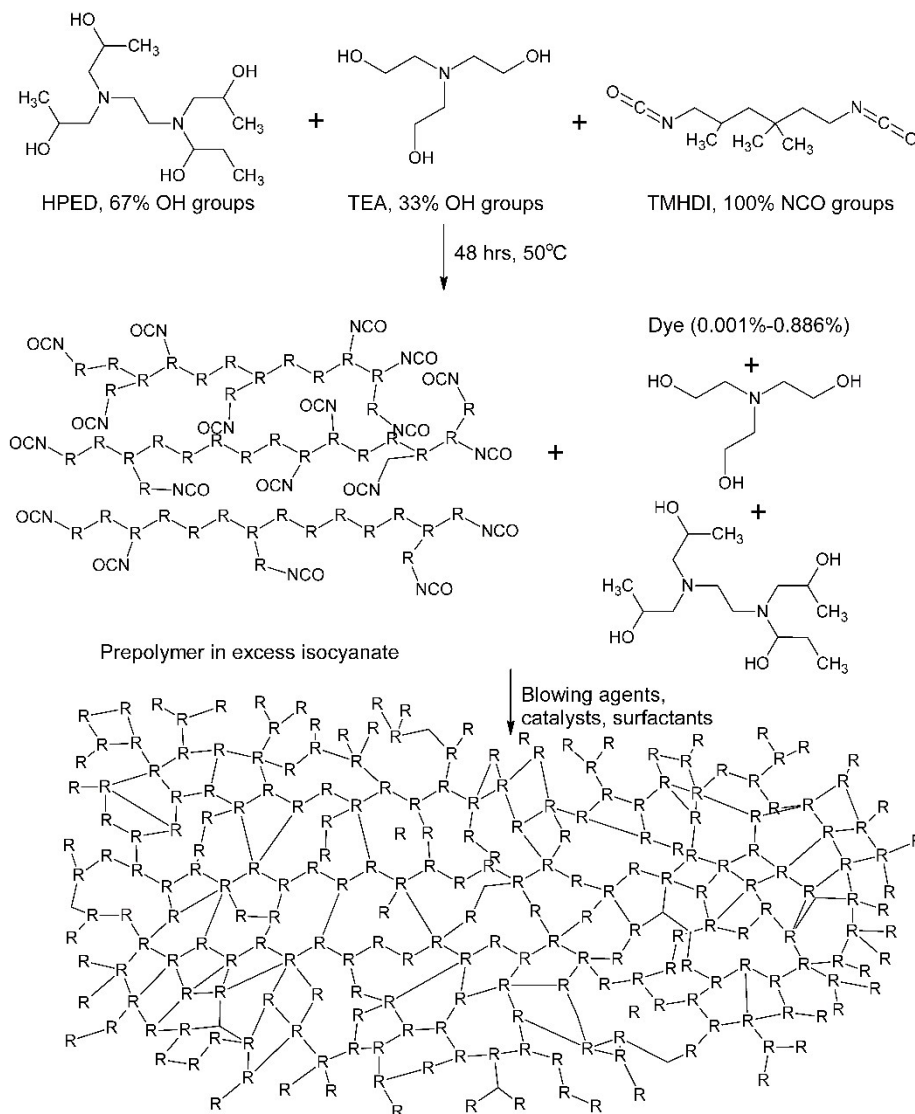
SI Figure 2. ¹H NMR spectra of phloxine B urethane in DMSO.



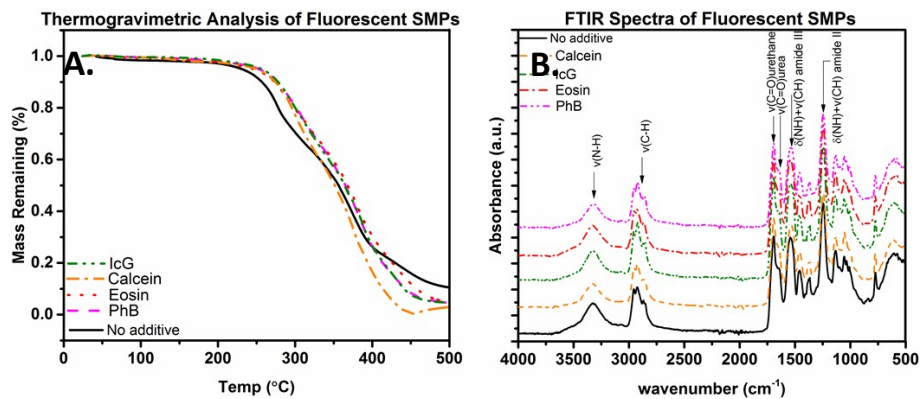
SI Figure 3. ^{13}C NMR spectra of phloxine B urethane in DMSO.



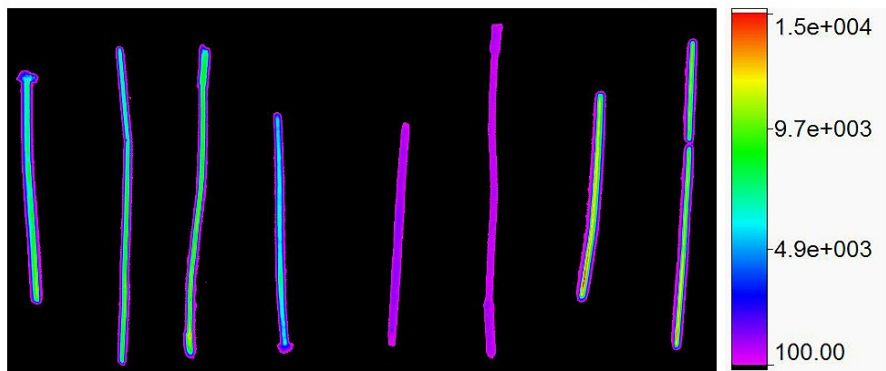
SI Figure 4. Model reaction of ethyl isocyanate with indocyanine green (IcG), demonstrating the formation of the carbamate linkage, confirmed by ^1H NMR and MS (yield of approximately 66%, predicted: $1/3\text{M} + 3\text{H}^+$: 299.1738, experimental: 299.1945). Additional side products include the single carbamate and the urea (yield of approximately 20%)



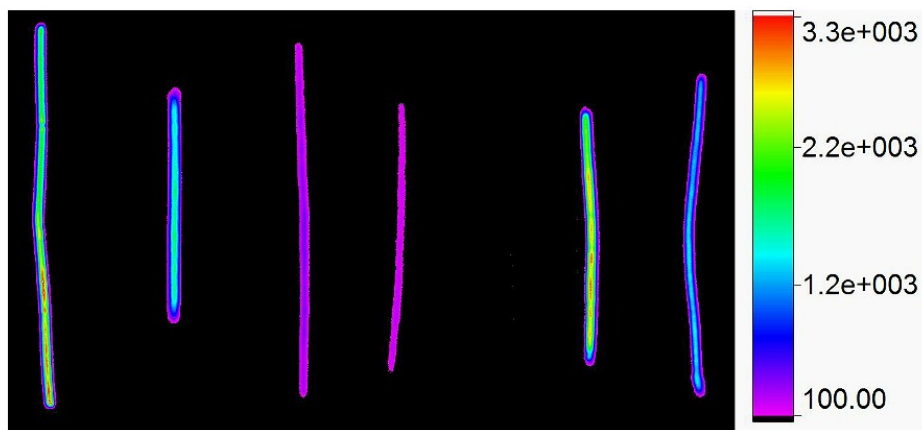
SI Figure 5. General synthetic scheme for the production of the highly crosslinked fluorescent shape memory polymers.



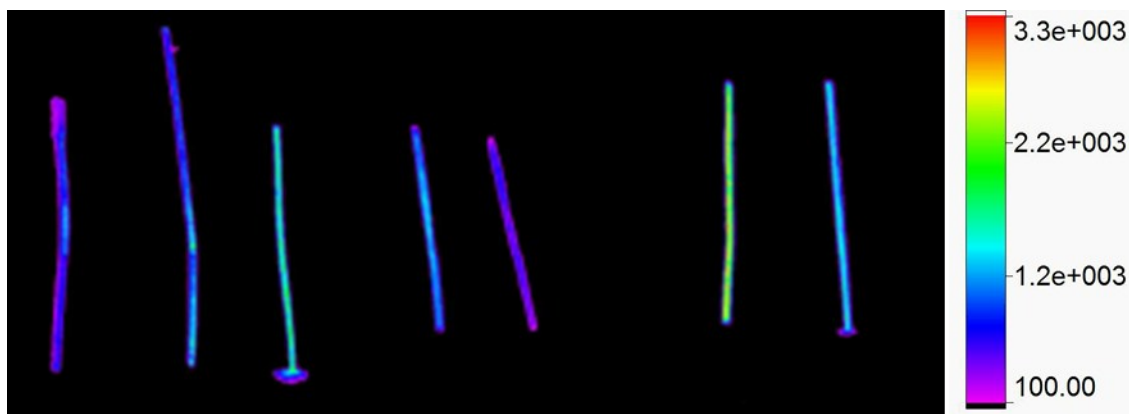
SI Figure 6. A. TGA curves and B. FTIR spectra of SMP foams with fluorescent dyes included.



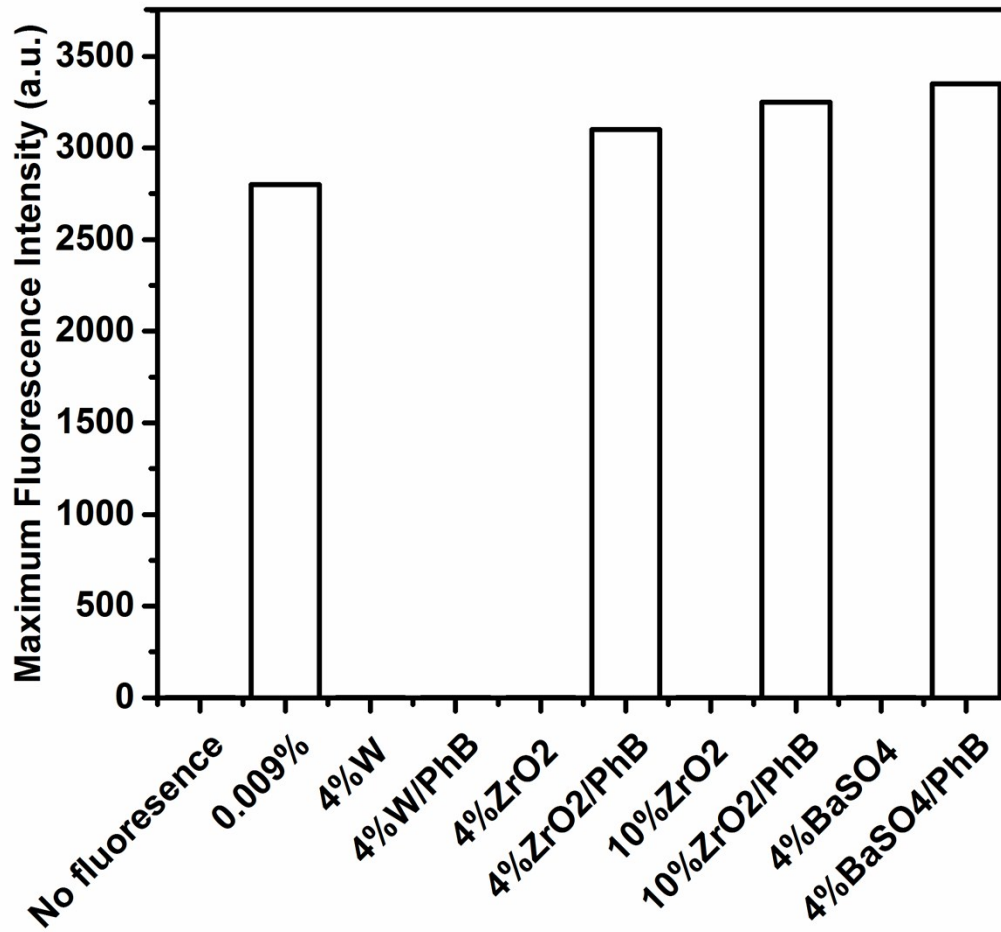
SI Figure 7. Fluorescence emissions visualized colormetrically for eosin SMPs.



SI Figure 8. Fluorescence emissions visualized colormetrically for cardiogreen SMPs.



SI Figure 9. Fluorescence emissions visualized colormetrically for calcein SMPs.



SI Figure 10. Fluorescence intensity through poultry tissue of PhB-containing SMPs.