

**Supplementary Figure 1.** Gelation of TGM and crosslinked TGM 10 wt % hydrogels with P-1440 crosslinker at 1:1 amine:epoxy mol ratio at 37°C after 1 h (left column) and 4°C in excess PBS pH 7.4 after 3 h (right column). TGM only hydrogels displayed syneresis and reversible gelation (red arrow) when transferred to 4°C, fully solubilizing after 12 h (data not shown). Crosslinked hydrogels turned transparent with a yellow tint due to the PAMAM after 1 h, and maintained their cylindrical shape in the absence of thermogelation (orientation and shape designated by the dotted line cylinder).