Supporting Information

Super-Tough Plant Oil based Elastomer for UV-light assisted 3D printed Soft Robotics and Shape-Memory

Agnija Ritere^a, Maksims Jurinovs^{a,*}, Oskars Platnieks^a, Anda Barkane^a, Sergejs Gaidukovs^{a,*}

^aInstitute of Chemistry and Chemical Technology, Faculty of Natural Sciences and Technology, Riga Technical University, P. Valdena 3/7, LV-1048, Riga, Latvia. E-mail: Maksims.Jurinovs@rtu.lv, Sergejs.Gaidukovs@rtu.lv



Fig. S1. Resin viscosity changes depending on storage time (a), photo-rheology (b) complex viscosity and (c) dynamic time sweep curves for resins with varying HEA concentrations



Fig. S2. 3D printed calibration model



Fig. S3. FTIR spectra maximum for formulations with varying ARO/IBOA ratios. Uncured resin (dots) and 3D printed sample (line)



Fig. S4. FTIR spectra of cured resin components



Fig. S5. Close-up FTIR spectra of theoretical (dots) and 3D printed (line) formulations with varying HEA ratios for (a) carbonyl and (b) OH group peaks



Fig. S6. FTIR spectra of RIH3 with varying post-processing conditions close-up of carbonyl (a) and OH (b) group peaks



Fig. S7. TGA curves for 3D printed samples with varying post-processing conditions



Fig. S8. Photo of 3D printed RIH3 5x5x5 mm cubes, showcasing dimensional stability