



Supplementary file 4. The force degradation measures the energy loss for PDMS A10 with 300% oil surrogate over time. Vectors in this graph indicate the measured force degradation for five different specimens during multi-axial deformation at 5 Newton for 60 seconds. Specimens were evaluated using data collected while held for 60 seconds at a maximum force of 5 N during the 5th cycle. The force degraded by an average of 0.487N after 60 seconds, demonstrating a time dependant viscoelastic response to cyclic loading.