

Supplementary information

Table S1 Average impact velocity, energy, force at peak, energy at peak and displacement for all impacted samples

Velocity at Start [m/s]	Measured impact energy [J]	Force at Peak [N]	Energy at Peak [J]	Displacement at Total [mm]
0.77	1.48	7832.09	1.38	-33.28

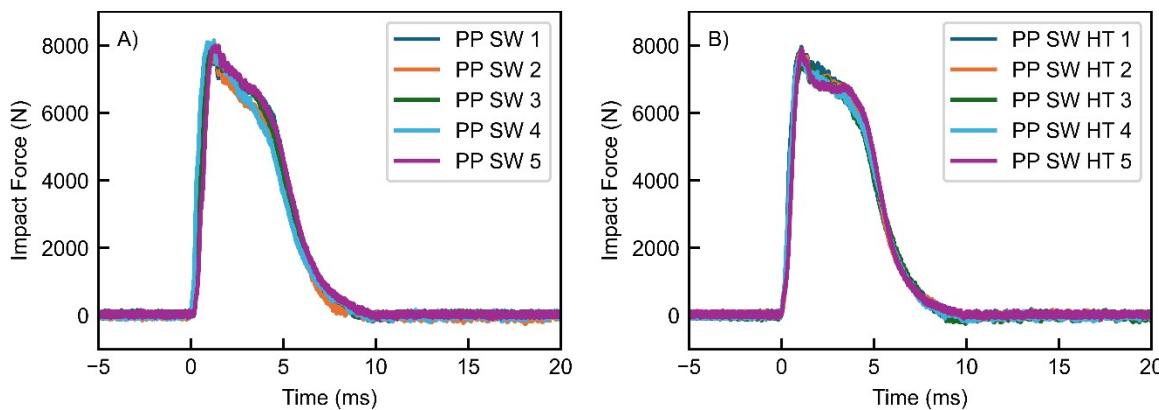


Figure S1 Recorded impact force timeseries for all impacted samples; A) Sample Set 2; B) Sample Set 4.

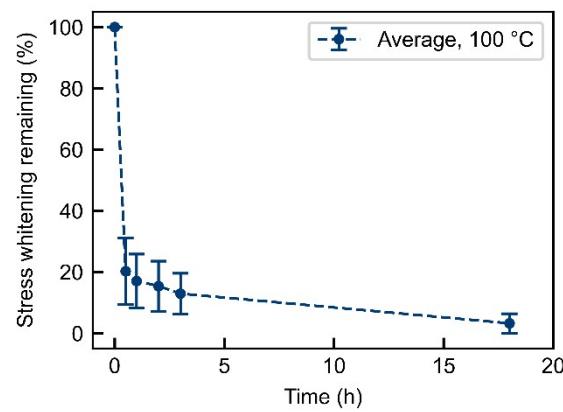


Figure S2 Average apparent reduction of stress whitening by heating of five samples (PP SW HT 1-5). Error bars indicate standard deviation.

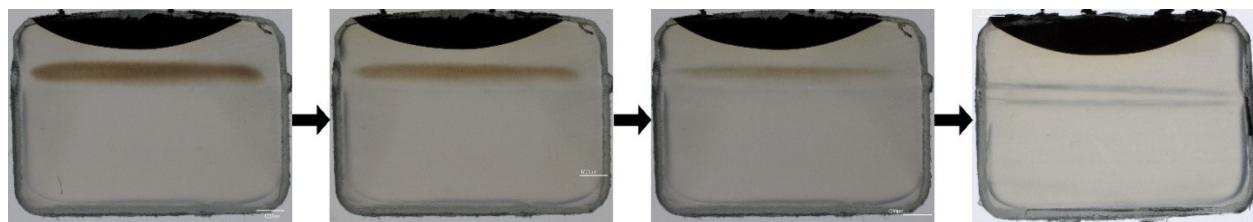


Figure S3 Microscope images taken during heat treatment, showing the visible reduction in stress whitening. Stress whitening appears brown due to backlighting in the microscope.