Supplementary Information (SI) for Materials Advances.

Table S1. Synthetic urine composition

Compound	**g/L**	**mM**
$CaCl_2$	0.65	4.40
$MgCl_2$	0.65	3.20
NaCl	4.60	78.70
Na_2SO4	2.30	16.20
Na_3citrate	0.65	2.60
$Na_2(COO)_2$	0.02	0.15
KH_2PO_4	4.20	30.90
KCl	1.60	21.50
NH_4Cl	1.00	18.70
$CO(NH_2)_2$	25.00	417.00

[a] Merck, UK, [b] VWR, PA, USA, [c] Honeywell, NC, USA.

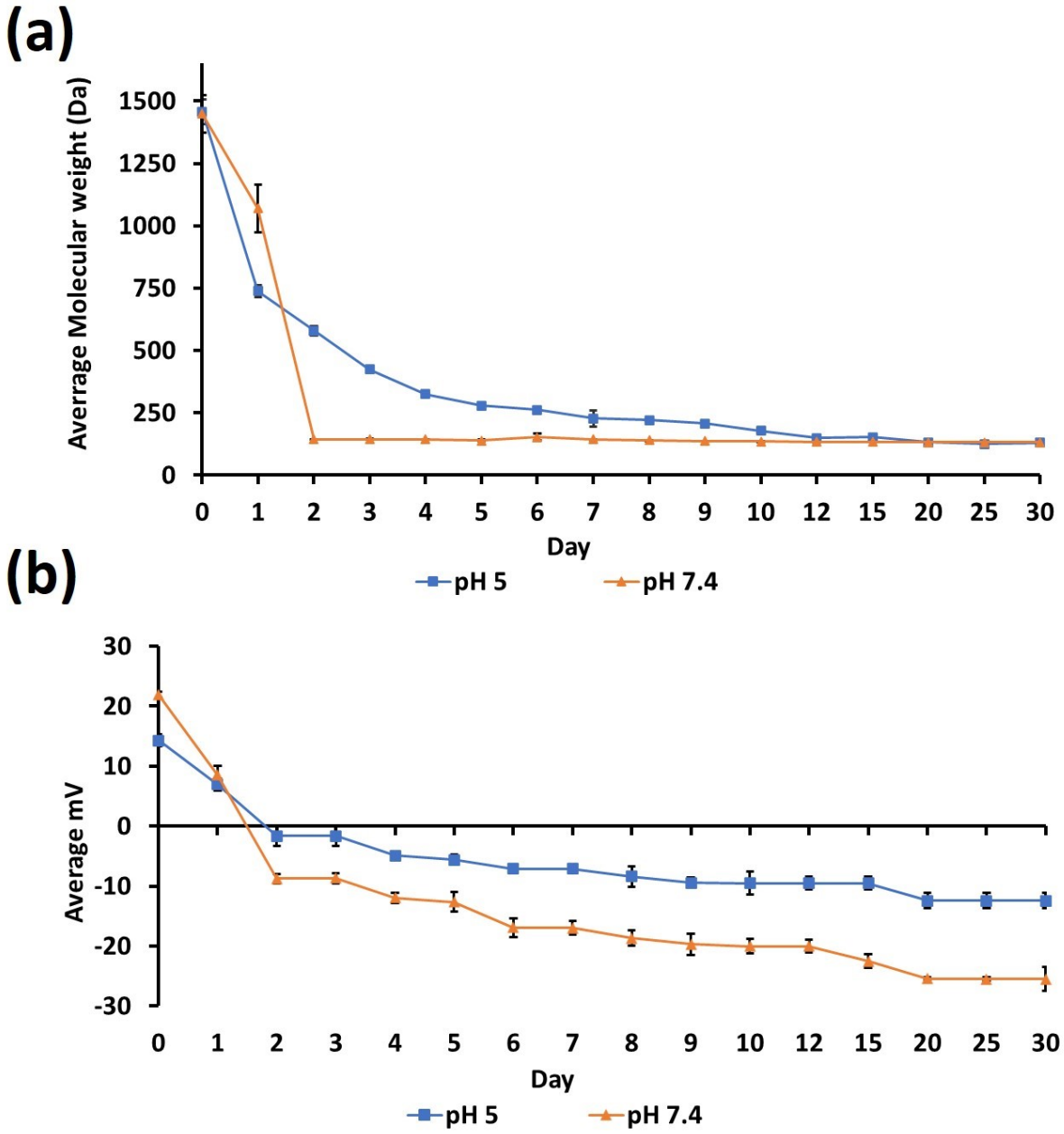

Figure S2. Polymer characteristics (a) Poly β-amino ester hydrolysis and (b) zeta potential determination [mean, n = 2].

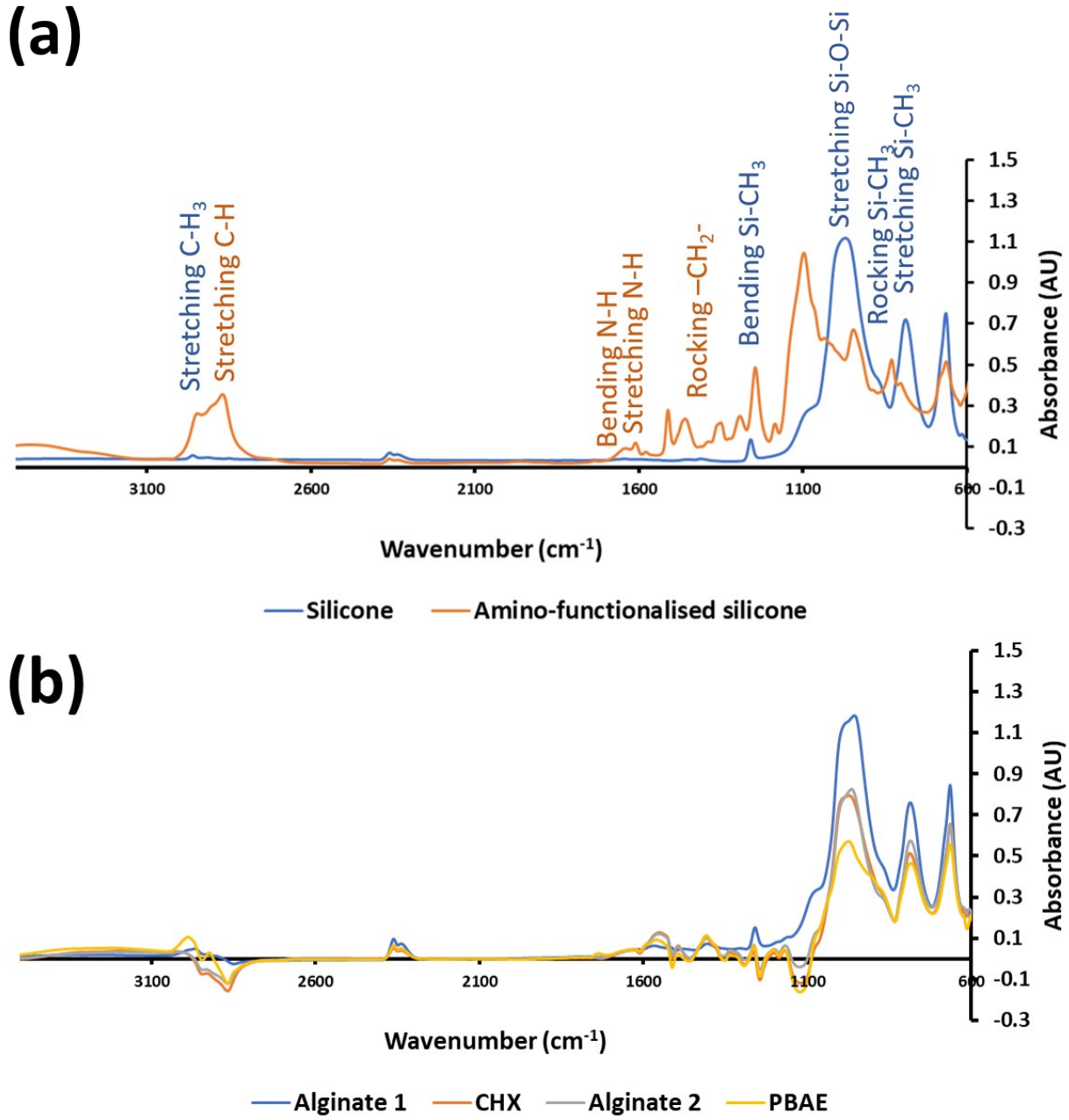

Figure S3. FTIR spectra (a) silicone material and amino-functionalisation, and (b) layers comprising 1QL [n = 2, each side of silicone sample].

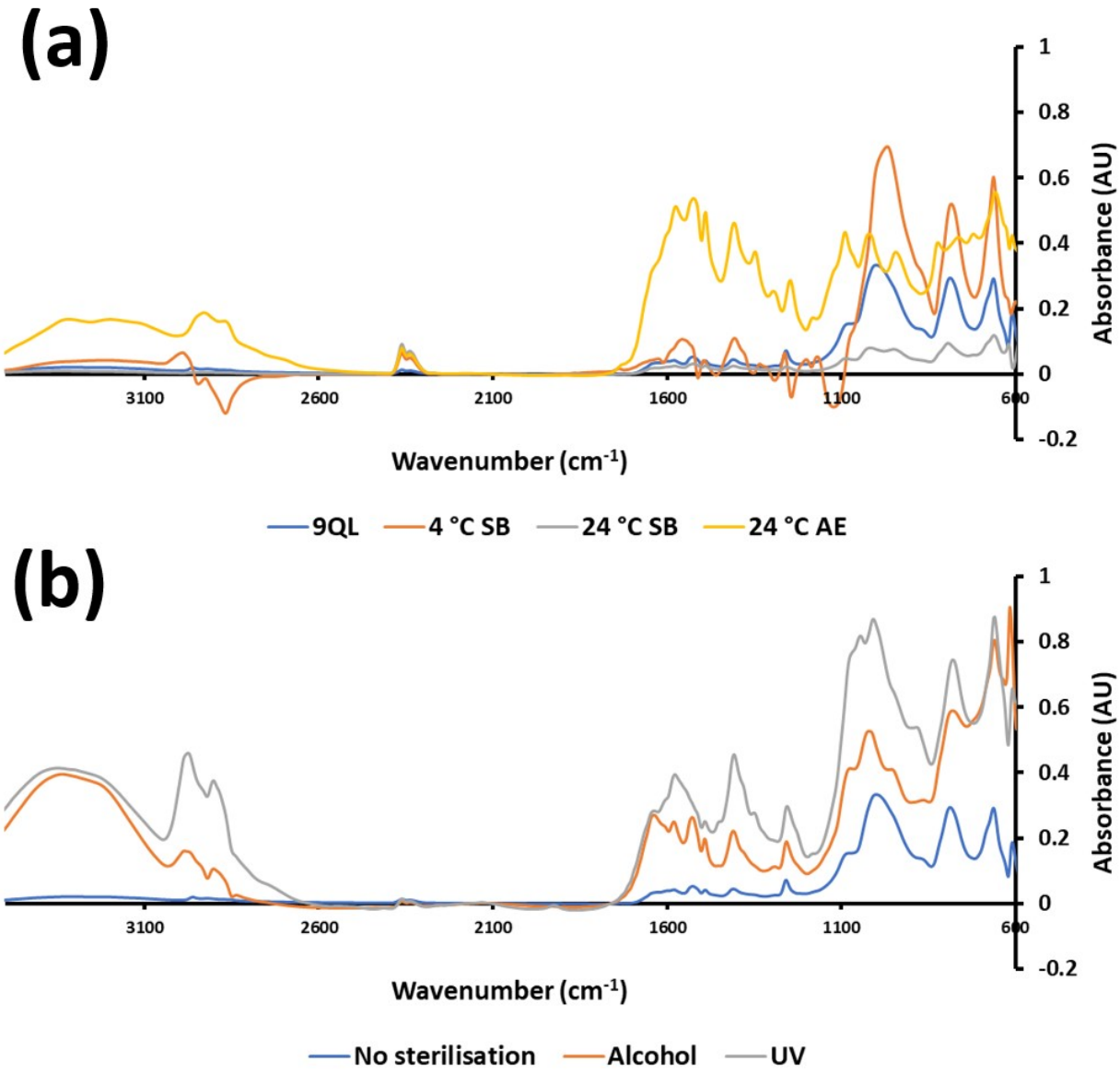

Figure S4. FTIR spectra following material preparation testing (a) storage conditions and (b) sterilisation techniques. SB = Sealed bag, AE = Air exposed [n = 2, each side of silicone sample].

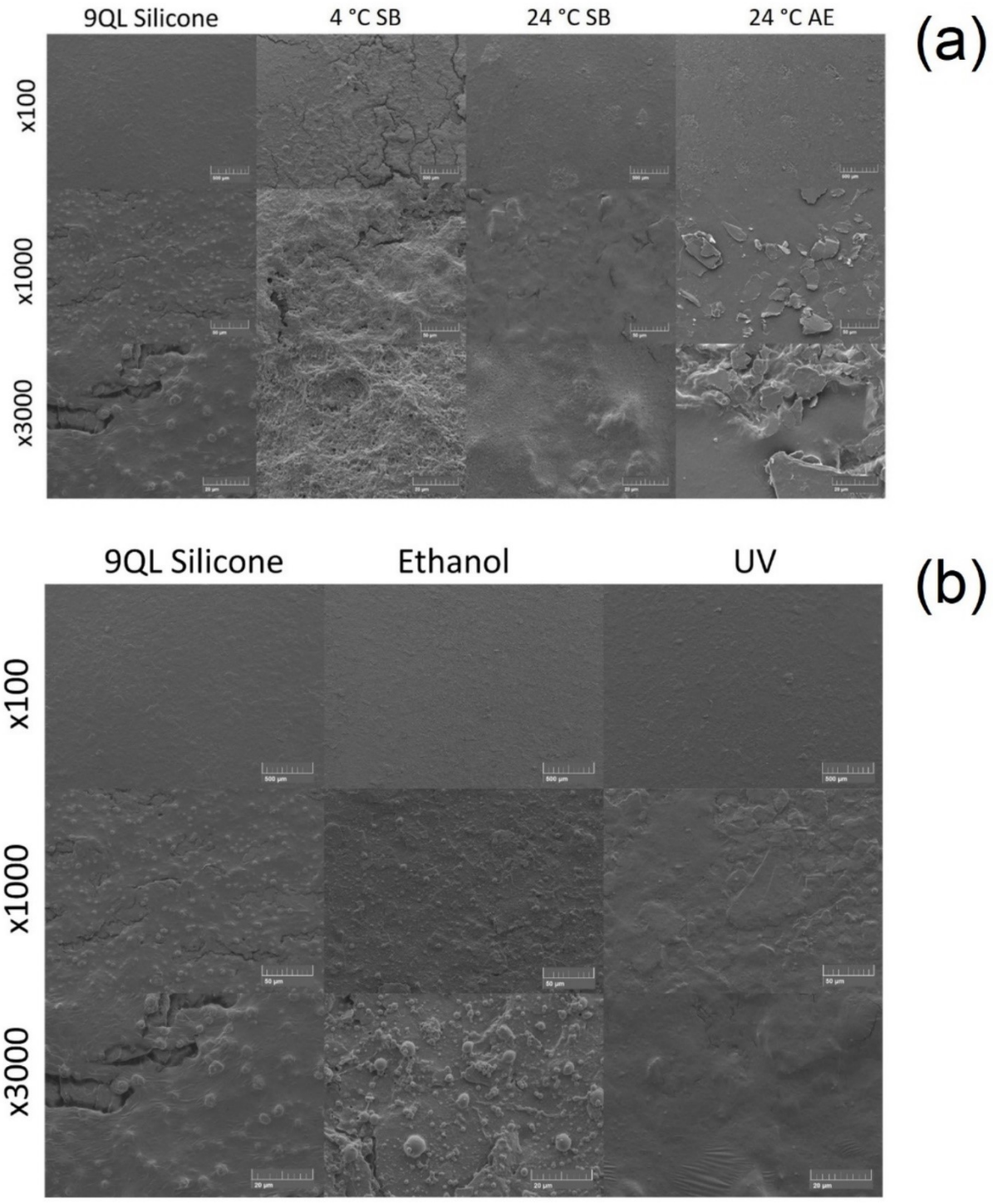

Figure S5. SEM images of material surfaces after incubation at storage conditions for 30 days, compared with 9QL silicone (a) and SEM images of material surfaces sterilised with ethanol and irradiated with UV, compared with 9QL silicone (b). bar = 500 μm at x100, 50 μm at x1000 and 20 μm at x3000. SB = Sealed bag, AE = Air exposed