Electronic Supplementary Information (ESI) for RSC. Adv.

Short-chain fluorocarbon-based polymeric coating for excellent nonwetting ability against chemical warfare agents

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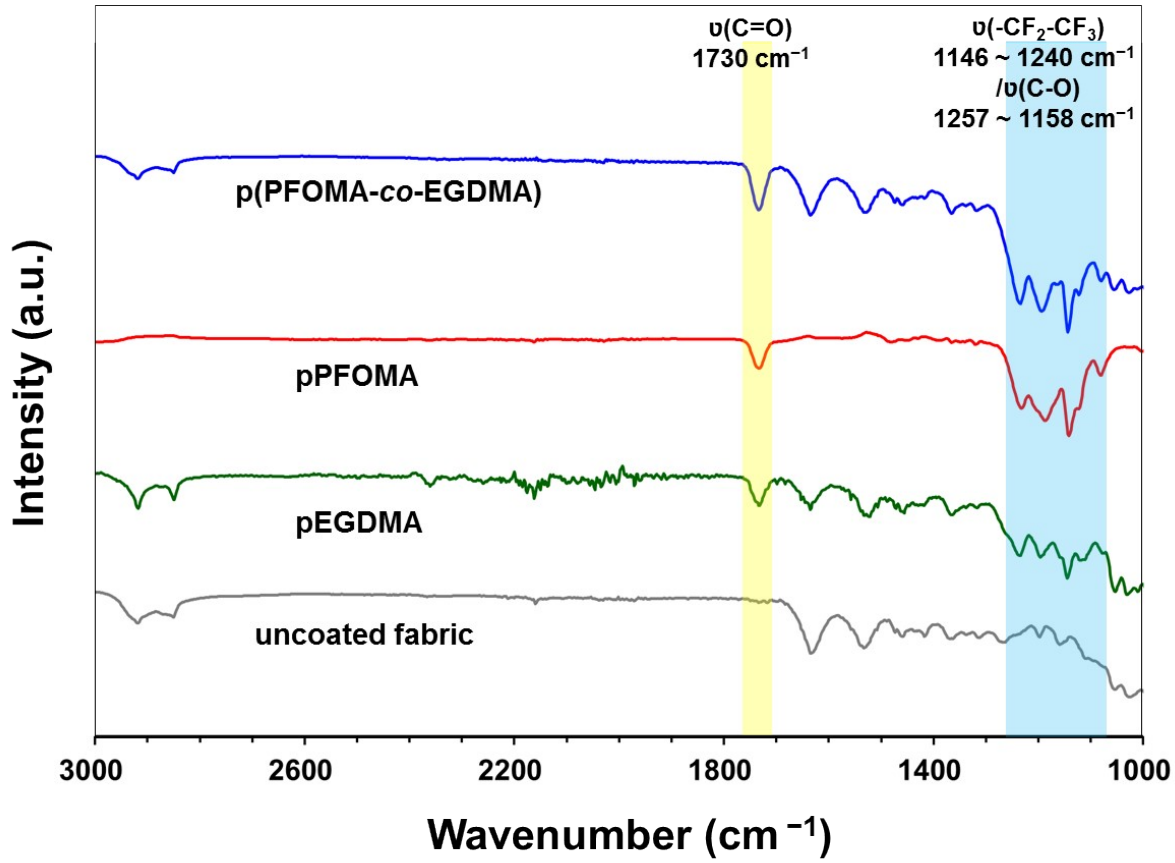

Fig. S1 FTIR spectra of polymeric coatings.

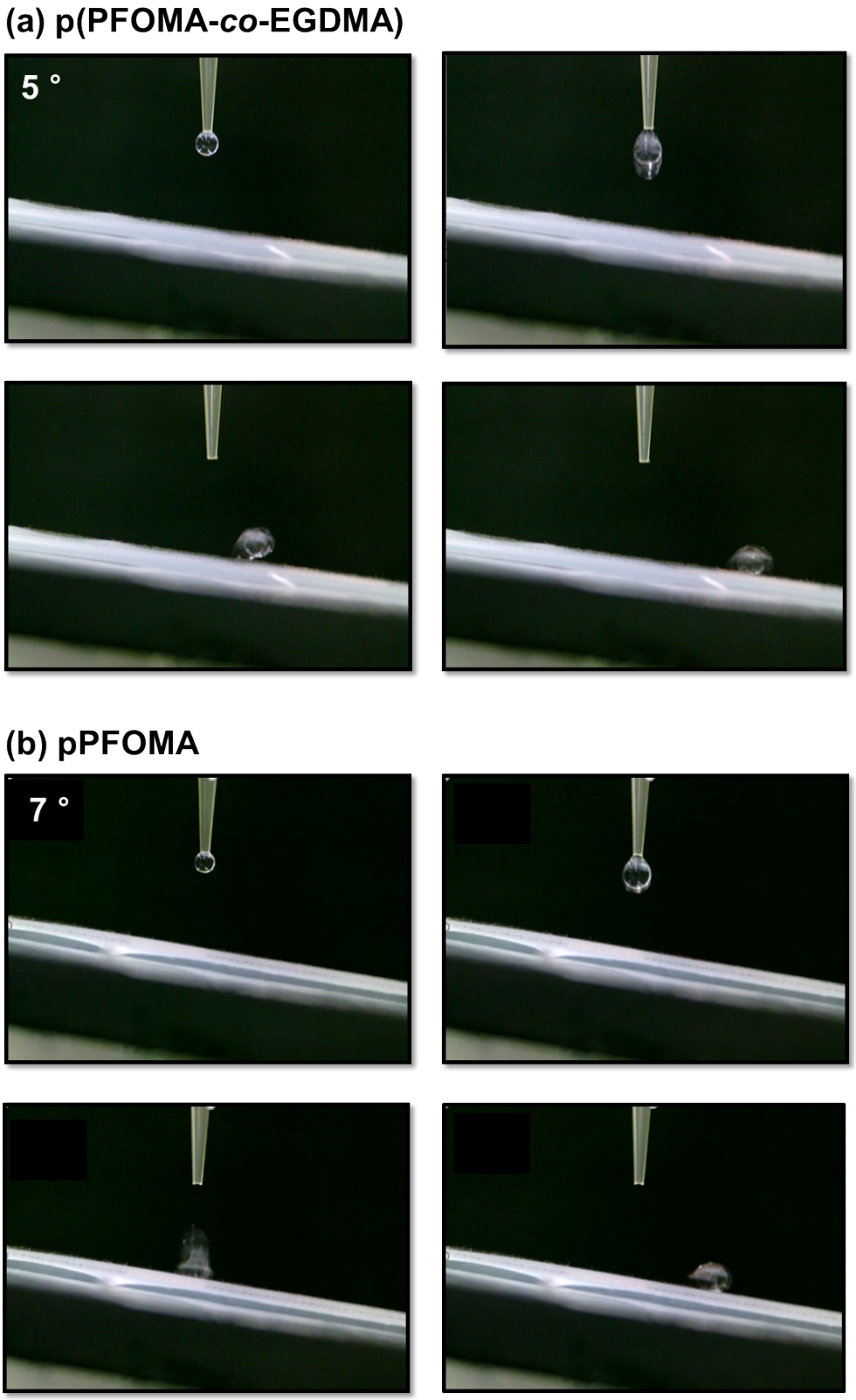

Fig. S2 Video screenshots of water shedding angles for (a) p(PFOMA-*co*-EGDMA)- and (b) pPFOMA-coated surfaces.

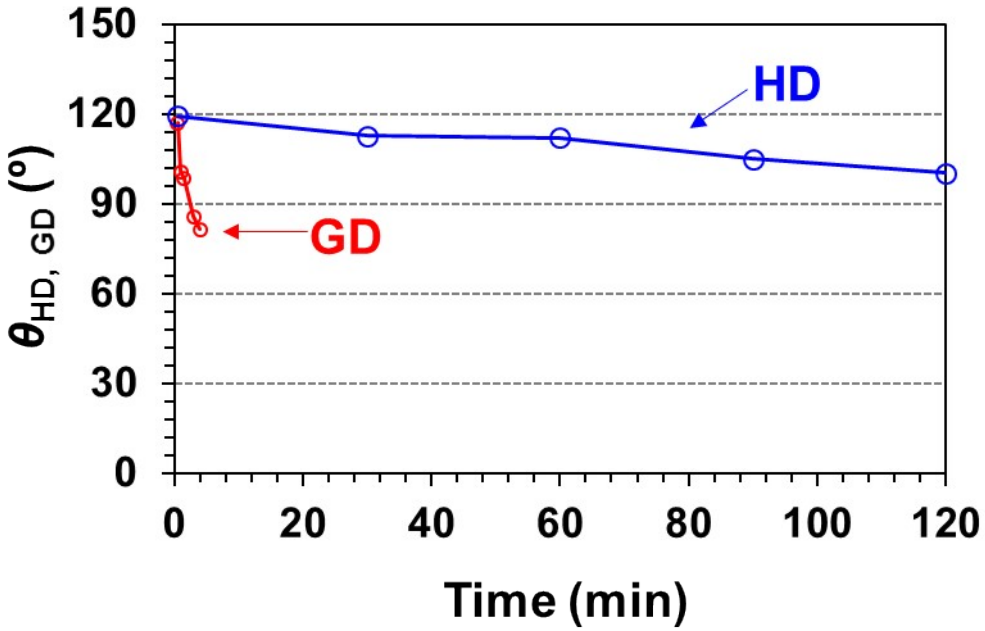

Fig. S3 Dynamic wetting curves (the static CA values) of HD and GD droplets.

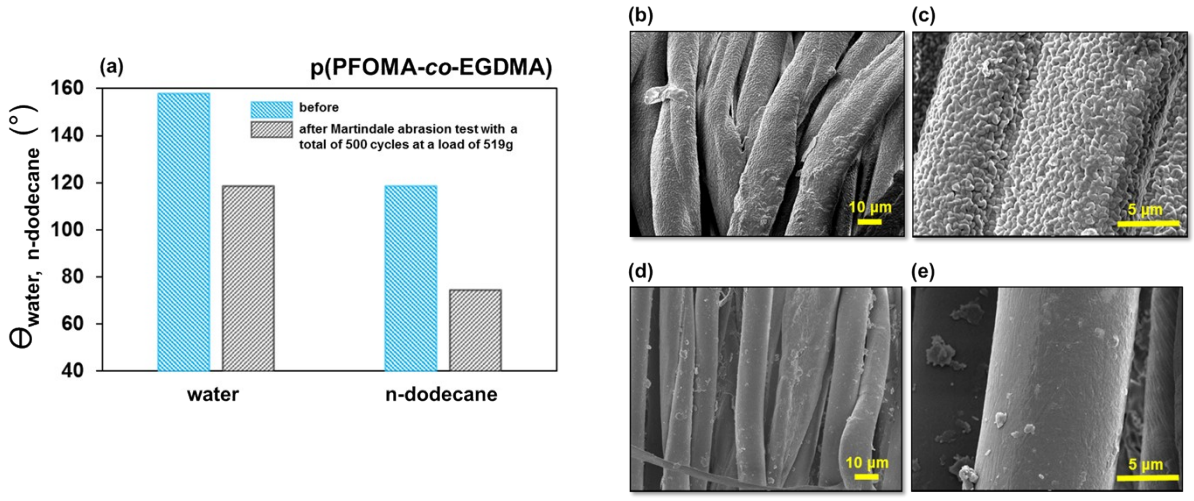

Fig. S4 (a) Effect of Martindale abrasion cycles (a total of 500) on the water and n-dodecane repellency of the polymeric coatings. SEM images of (b and c) p(PFOMA-*co*-EGDMA) coating and (d and e) the same coating after 500 Martindale abrasion cycles.

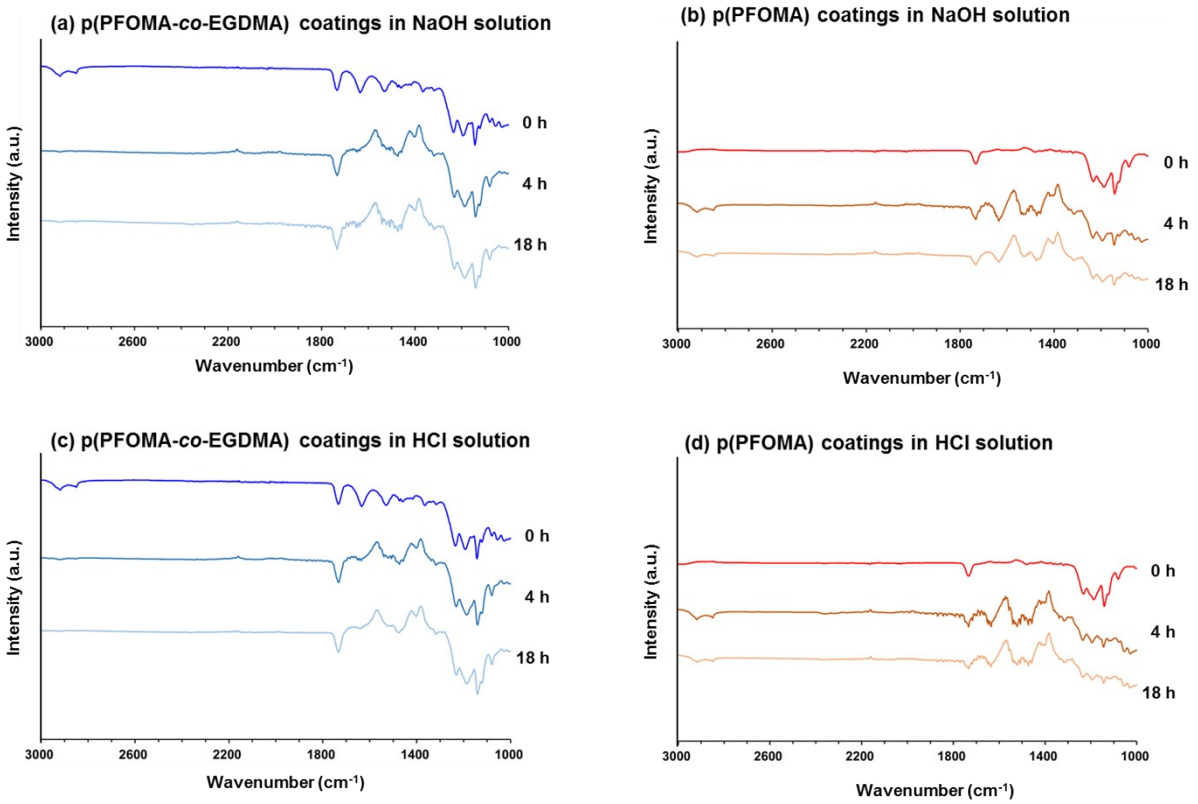

Fig. S5 Fourier-transform infrared spectra of p(PFOMA-*co*-EGDMA) and p(PFOMA) coatings after being treated with 1 M NaOH and 1M HCl solutions.

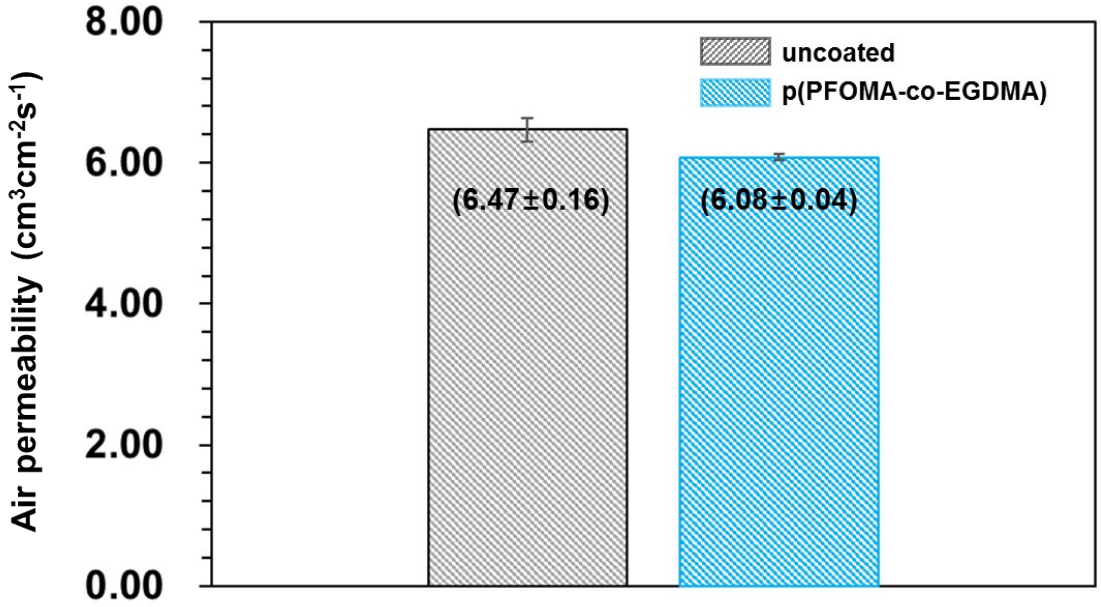

Fig. S6 Air permeability for p(PFOMA-co-EGDMA) coating and uncoated.

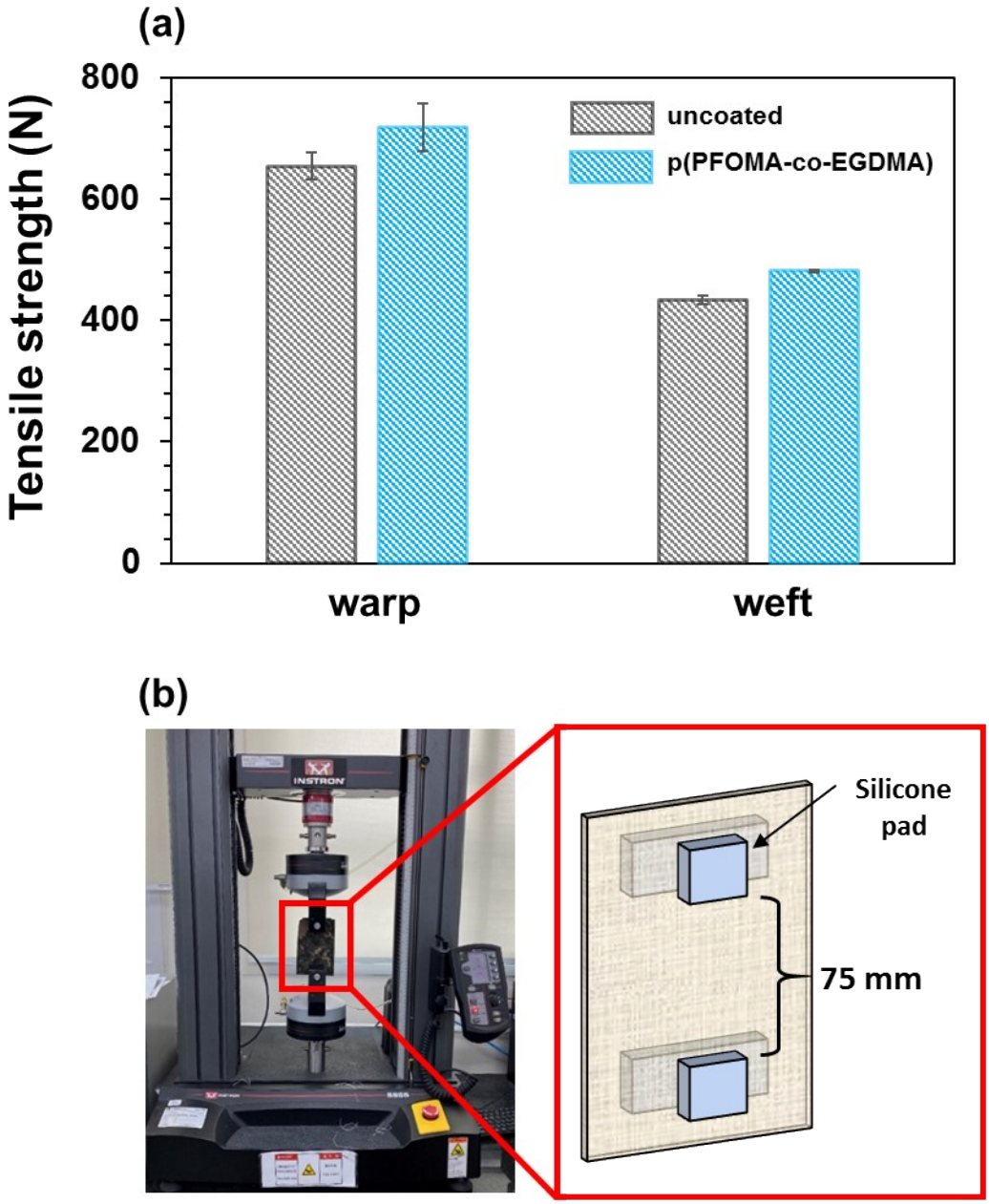

Fig. S7 (a) The tensile strength values (warp and weft direction, respectively) of the p(PFOMA-*co*-EGDMA) coating and uncoated fabric. (b) The configuration of the experimental setup for tensile strength characteristics using a universal testing machine (UTM, Instron-5965) in accordance with KS K0520:2015(Textiles – Tensile properties of fabrics – Determination of maximum force and elongation at maximum force using the gram method).