Supplementary information

Colloidal Assembly of Polydisperse Particle Blends during drying

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Figure S1. ¹H NMR spectrum of purified pDMAPS₂₄.



Figure S2. ¹H NMR spectrum of pDMAPS₂₄-*block*-(pBuMA_{18.8}-*stat*-pEHMA_{6.3}) diblock copolymer in trifluoroacetic acid-*d*.



Figure S3. Heat flow versus temperature of zwitterionic sample heated from -80 °C to 250 °C, analysed by DSC.



Figure S4. Average roughness (Ra) of the top surface of colloidal polymer films at the edge (a) and the centre (b) as determined from AFM topography maps.



Figure S5. FTIR-ATR scans along a diagonal of the surface of control P(MMA-BA) latex films dried at different evaporation rates.



Figure S6. FTIR-ATR scans along a diagonal of the surface of control zwitterionic latex films dried at different evaporation rates.



Figure S7. FTIR-ATR scans along a diagonal of the surface of latex films cast from $P(MMA/BA)/zwitterionic particle blends, <math>\phi_{zwitterionic} = 0.18$, dried at different evaporation rates.



Figure S8. FTIR-ATR scans along a diagonal of the surface of latex films cast from $P(MMA/BA)/zwitterionic particle blends, <math>\phi_{zwitterionic} = 0.35$, dried at different evaporation rates.



Figure S9. AFM topography maps of control zwitterionic latex films dried at different evaporation rates.