Morphology and pervaporation performance of ionic liquid and

waterborne polyurethane composite membranes

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1. Supporting Information



S1. FTIR spectra of pure WPU and [emim][PF₆]/WPU composite membranes, (a), (b),(c) changes in 3150-3110 cm⁻¹,1680-1760 cm⁻¹ and 800-870

(a) (b) (c) (d) (d) (c)

cm⁻¹ wavenumber with the addition of [emim][PF₆].

S2. SEM photographs of cross section of pure WPU and [emim][PF₆]/WPU composite membranes: (a) cross section of WPU, (b) cross section of WPU-5, (c) cross section of WPU-10,(d) cross section of -15.

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S3. Element mapping of the cross section of [emim][PF₆]/WPU composite membranes. (a) Phosphorus (P) signals are from WPU-5, (b) P signals

are from WPU-10.