Supplementary Information

Ethenylene-bridged periodic mesoporous organosilicas with ultra-large mesopores

Carl Vercaemst, a* Petra E. de Jongh, b Johannes D. Meeldijk, b Bart Goderis, c Francis Verpoort a and Pascal Van Der Voort a

SI-Fig. 1 TEM-image of ethylene-bridged PMO synthesized with TMB (EBP-2), illustrating the presence of nodular strings.

100 nm
SI-Fig. 2  TEM-image of ethylene-bridged PMO synthesized with TMB (EBP-2), illustrating foam-like patches.

SI-Fig. 3  TEM-image of ethylene-bridged PMO synthesized with TMB (EBP-3), illustrating foam-like patches.
SI-Fig. 4  TEM-image of bimodal ethylene-bridged PMO synthesized with TMB (EBP-5), illustrating both ultra-large mesopores (~ 21 nm) and large mesopores (~ 8 nm).
SI-Fig. 5  BJH pore size distribution of EBP-2, EBP-3 and EBP-4, calculated from the adsorption isotherm.

SI-Fig. 6  Relative nitrogen adsorption of EBP-2, EBP-3 and EBP-4 (volume adsorbed divided by BET surface area), as a function of relative pressure, showing only a minor difference in microporosity.
SI-Fig. 7  Nitrogen physisorption isotherms of a bimodal ethylene-bridged PMO synthesized with TMB (EBP-5). A two-step adsorption isotherm is apparent.