

Tailoring the mechanical performance of highly permeable macroporous polymers synthesized via Pickering emulsion templating **

By Vivian O. Ikem, Angelika Menner, Alexander Bismarck*

E-mail: a.bismarck@imperial.ac.uk

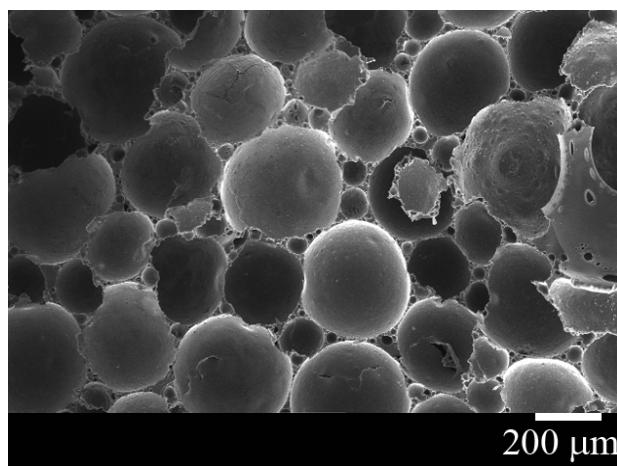
Keywords: PolyHIPEs, permeability, emulsion templates, HIPEs, Pickering emulsions

Supplementary Information

Exploring various surfactant soluble in PEGDMA

We investigated using other surfactants, which are soluble in PEGDMA to replace Hypermer 2296, which is not soluble in PEGDMA. It was hoped that the addition of the surfactant to the Pickering emulsion templates will lead to the formation of pore throats in the final materials, as was achieved with Hypermer 2296. Nevertheless, the addition of Hypermer 2234 and Hypermer 2524 to the Pickering emulsion templates did not lead to the formation of interconnecting pore throats. See images below.

1. Addition of 5 vol.-% Hypermer 2234 to a premade Pickering emulsion template



2. Addition of 5 and 10 vol.-% Hypermer 2524 to premade Pickering emulsion templates

