Electronic Supplementary Information

Synthesis of Crosslinked Polymeric Nanocapsules using Catanionic Vesicle Templates Stabilized by Compressed CO₂

Siming Dong, Patrick T. Spicer, Frank P. Lucien, Per B. Zetterlund*

Centre for Advanced Macromolecular Design (CAMD), School of Chemical Engineering, The University of New South Wales, Sydney, NSW 2052, Australia Tel: +61 2 9385 4331; Fax:+61 2 9385 6250; E-mail: p.zetterlund@unsw.edu.au

* Corresponding author



Scheme S1. Chemical structure of phenylbis(2,4,6-trimethylbenzoyl)phosphine oxide (Irgacure 819).



Fig. S1. Retention of NBA in nanocapsules; (A) blank nanocapsules after multiple washings; (B) nanocapsules with entrapped NBA after multiple washings.

Phase behavior before polymerization (118 wt%)



Fig. S2. Photographs of vesicle solution at 25 °C and a CO_2 pressure of 5.0 MPa before polymerization (Table 1, 118 wt% monomer rel. to total surfactant)



Fig. S3. Photographs of vesicle solution at 25 °C and a CO₂ pressure of 3.5 MPa before polymerization (A) and intensity-based size distributions before ($d_1 \sim 147$ nm) and after polymerization ($d_1 \sim 226$ nm) (B) (Table 1, 47 wt% monomer rel. to total surfactant).