Drop sizes and particle coverage in emulsions stabilised solely by silica nanoparticles of irregular shape

^aBernard P. Binks, ^aPaul D.I. Fletcher*, ^aBenjamin L. Holt and ^aJames Parker ^bPascal Beaussoubre and ^bKenneth Wong ^aSurfactant & Colloid Group, Department of Chemistry, University of Hull, Hull HU6 7RX, U.K. ^bFirmenich SA, P.O. Box 239, Route des Jeunes 1, CH-1211 Geneva 8, Switzerland

E-mail: P.D.Fletcher@hull.ac.uk (* to whom correspondence should be addressed)



Electronic supplementary information.

Figure A. Optical micrograph (upper image) and derived droplet size distribution (lower plot) for a 50 vol% limonene-in-water emulsion stabilised by 0.1 wt% of 67% SiOH silica particles. The scale bar corresponds to 200 μm. The solid line in the distribution plot shows the best-fit to a Gaussian distribution.



Figure B. Calibration graph of optical absorbance due to turbidity versus particle concentration in 50 vol% ethanol/water mixed solvent at wavelength 400 nm and 1 cm path length. Filled symbols refer to 100% SiOH and open symbols refer to 71% SiOH.