

Fig. S1. The size distribution by volume of microcontainer synthesized at different speed of the stirrer: 11000 min⁻¹ (red), 16000 min⁻¹ and (green), 22000min⁻¹(blue).

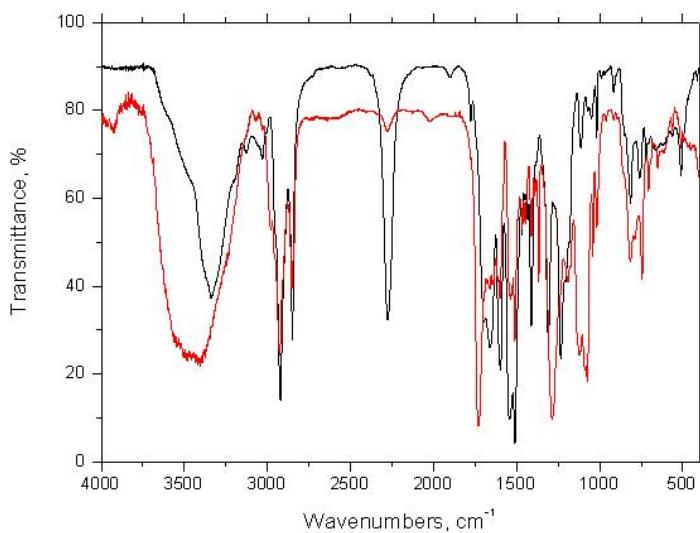


Fig. S2. FT-IR spectra of isocyanate prepolymer (black) and resulting microcontainers loaded with mixture of alkoxy silanes. Absence of the typical peak for isocyanate group at 2276 cm⁻¹ for resulting microcapsules indicates that reaction of –NCO group with alcohol or/and water was complete.



Fig. S3. Advancing contact angle on aluminum alloy plates after standard cleaning procedure (left, 65°) and after treatment with solution of alkoxy silanes in DEPh (right, 130 °, the composition of the mixture is the same as the core of the microcontainers). According to the equation of state derived by Neumann and Li [Li,D., Neumann, A.W., J. Colloid Interface Sci. 1992, 148, 190] the surface energy of the aluminum surface after standard procedure of cleaning (contact angle 65°) is equal to 43 mN/m, corresponding value for aluminum surface covered with monolayer of alkoxy silanes (contact angle 130°) is 8 mN/m. This calculations are in a well agreement with [Li,D., Neumann, A.W., J. Colloid Interface Sci. 1992, 148, 190]. Standard coatings for aluminum usually demonstrate hydrophilic behavior; contact angles with water usually lie in the range of 50-90 °, which corresponds roughly to the values of surface energy of 54-27 mN/m.