Electronic supplementary information

POLY(HEXAFLUOROISOPROPYLACRYLATE/ DECYL)METHYLSILOXANE COPOLYMER: A NEW MATERIAL WITH THE LOW SURFACE ENERGY

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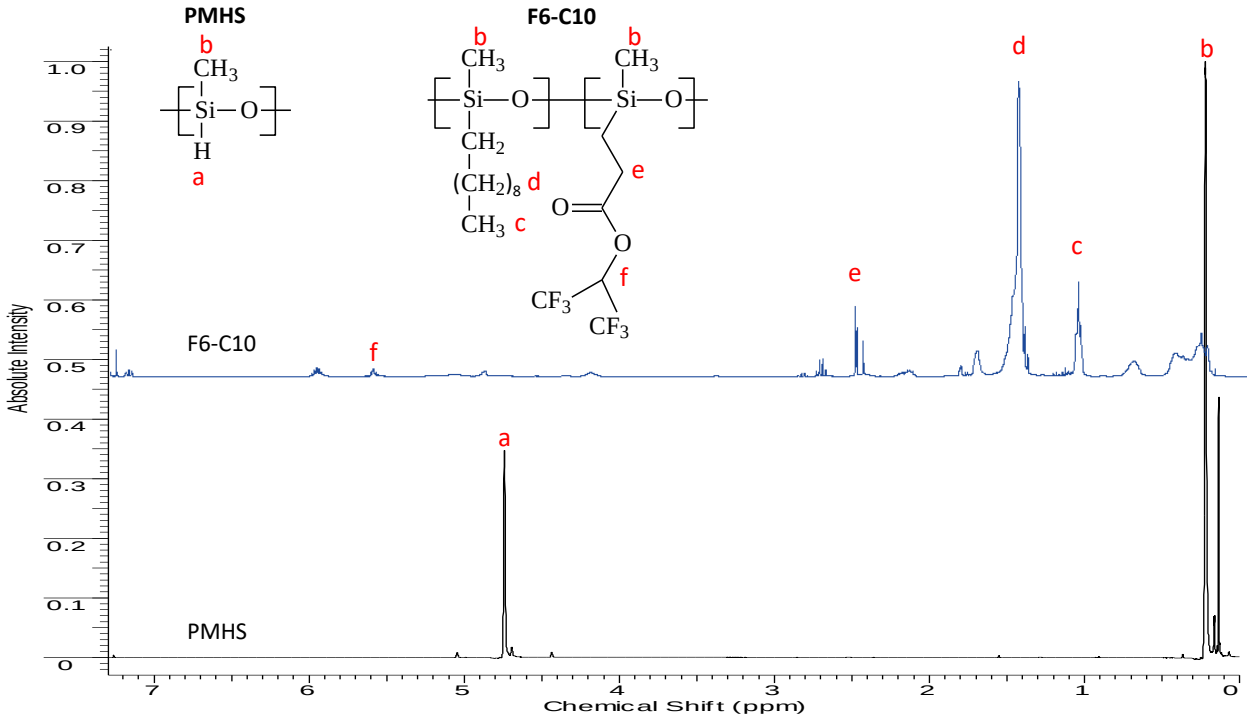

Figure S1. ^{1}H NMR spectra of PMHS and F6–C10.

Peak assignments: a signal at 5.97 ppm corresponds to the H_2C= group protons of the initial F6^{i}Pr-Acr, a signal at 5.60 ppm refers to the proton bound with the CF_3 groups of F6^{i}Pr-Acr, a signal at 4.90 ppm corresponds to the H_2C= protons from unreacted 1-decene.

The –$CH_2C(O)O$– protons are observed at 2.51 ppm. A signal at 1.46 ppm is characteristic of the –CH_2– unit of the side hydrocarbon moiety. A peak in the region of 1.08 ppm corresponds to the terminal methyl group protons of decene. A peak at 0.72 ppm corresponds to the Si–CH_2– protons. A signal in the region of 0.45 ppm corresponds to the Si-Me protons, and a signal in the region of 0.29 ppm—to the protons of the terminal methyl groups bound to the silicon atom ($SiMe_3$).

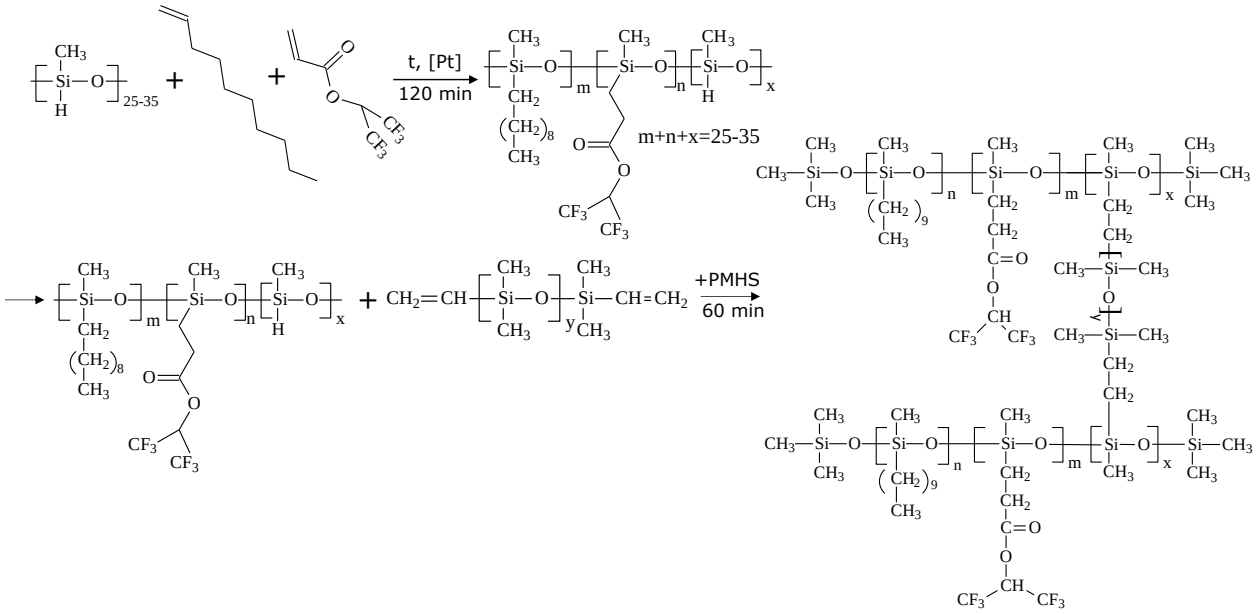

Figure S2. Synthesis of copolymer F6–C10.

Table S1. Water contact angles and the surface energy of C10 and F6–C10

Polymer	Water contact angle, °	Surface energy, mJ/m^2		
		dispersion	polar	total
C10	101	24	1.5	25.5
F6–C10	113	16	0.5	16.5