

Supporting information

Figure S1. Thermal gravimetric analysis of a film made from acrylate oligomers (1).

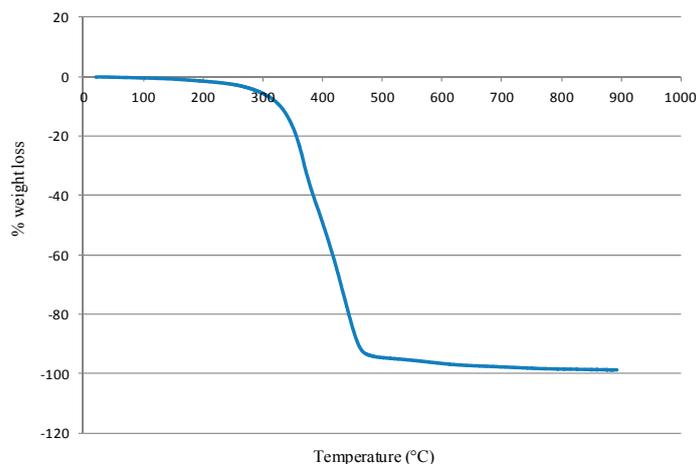


Figure S2. Non-leaching experiment: relative growth of two bacteria, *Staphylococcus aureus* and *Escherichia coli*, in a culture medium that had been in contact for 3 h or 24 h with acrylate (1) based coatings. *, difference in values significant at $p \leq 0.05$.

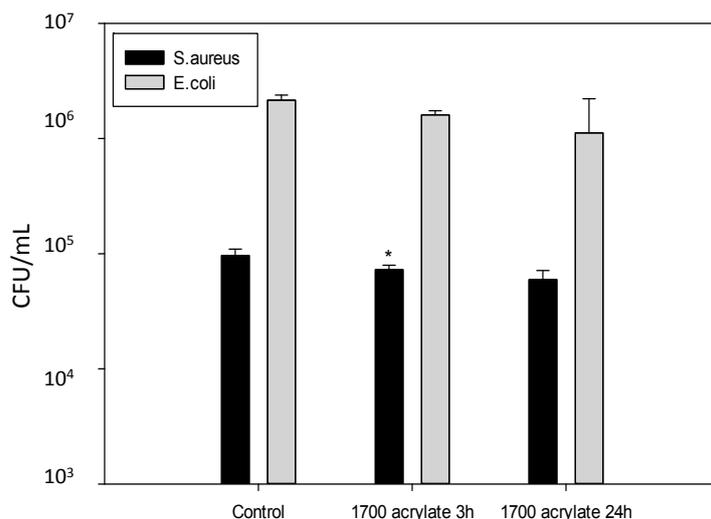


Figure S3. X reflectivity curves of thin acrylate (1) spin coated films: (a) inhomogeneous films (containing island-like domains) or thick rough films; (b) well defined thickness films. Relative data are presented in Table S1.

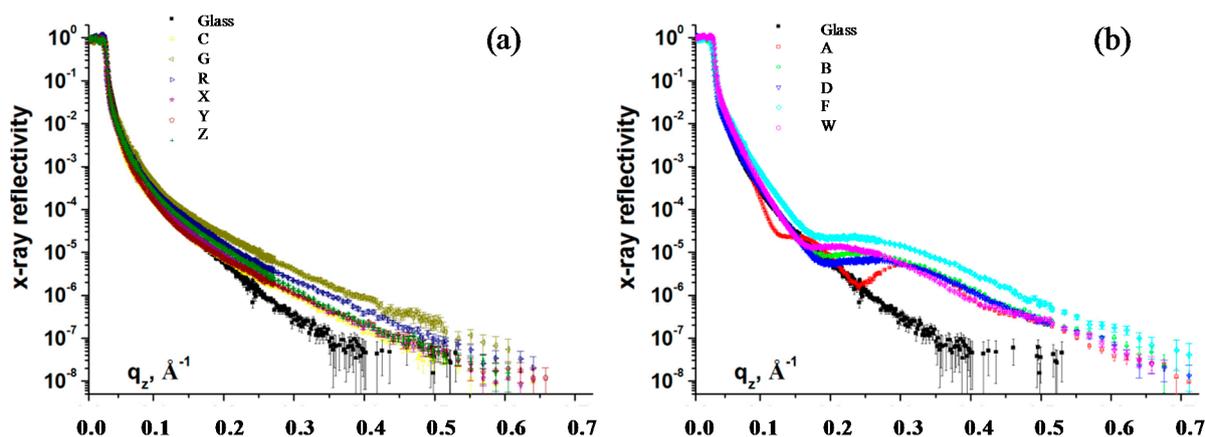


Figure S4. AFM images of: **(a)** bare borosilicate glass coupon surface; **(b)** acrylate **(1)** spin coated film on borosilicate glass coupon.

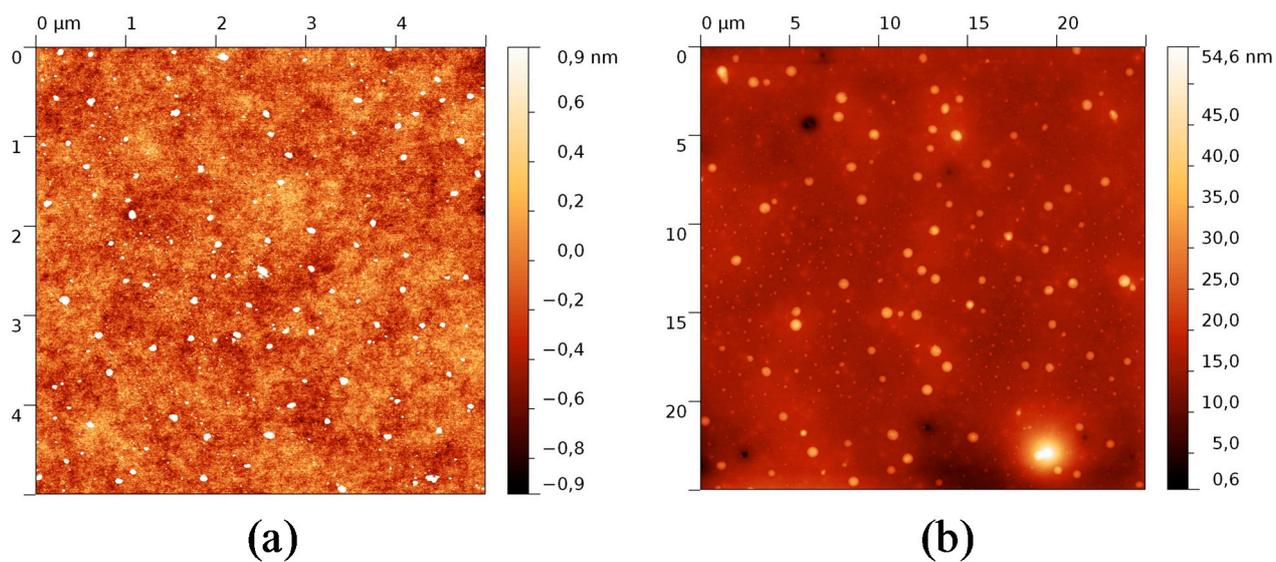


Figure S5. $^1\text{H-NMR}$ spectrum and chemical shifts of acrylate oligomer **(1)**.

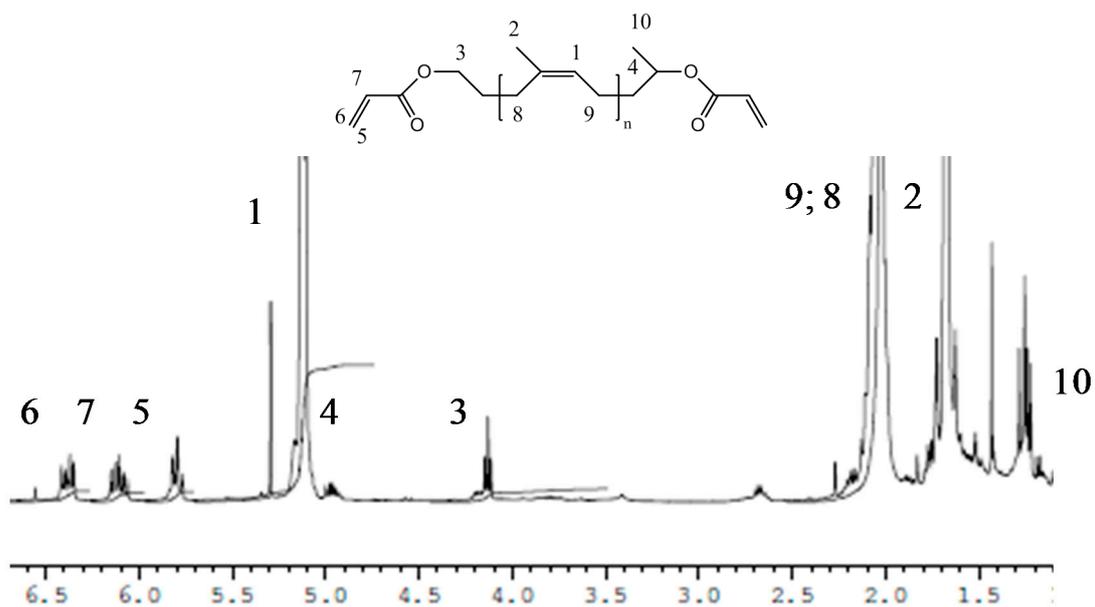


Figure S6. $^1\text{H-NMR}$ spectrum and chemical shifts of epoxydated acrylate oligomer (**2**).

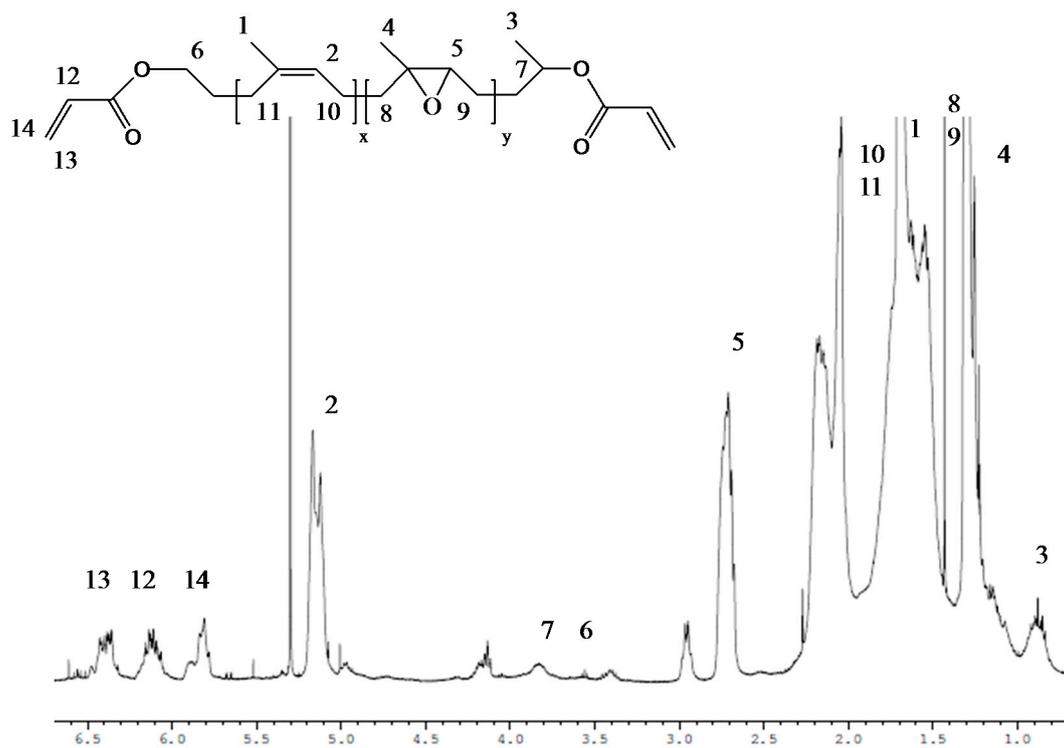


Figure S7. $^1\text{H-NMR}$ spectrum and chemical shifts of hydrogenated acrylate oligomer (**3**).

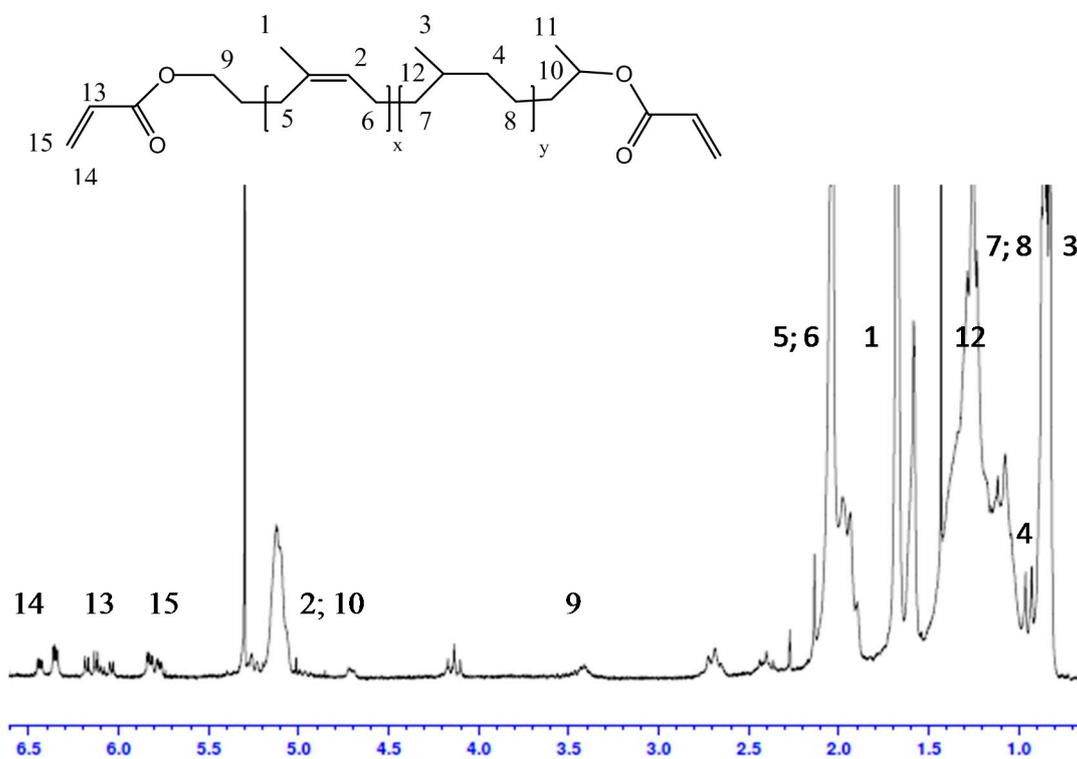


Figure S8. (a) $^1\text{H-NMR}$ spectrum of zosteric acid disodium salt (200 MHz, D_2O); (b) IR spectrum of zosteric acid sodium salt; and (c) (200 MHz, DMSO) $^1\text{H-NMR}$ spectrum of zosteric acid.

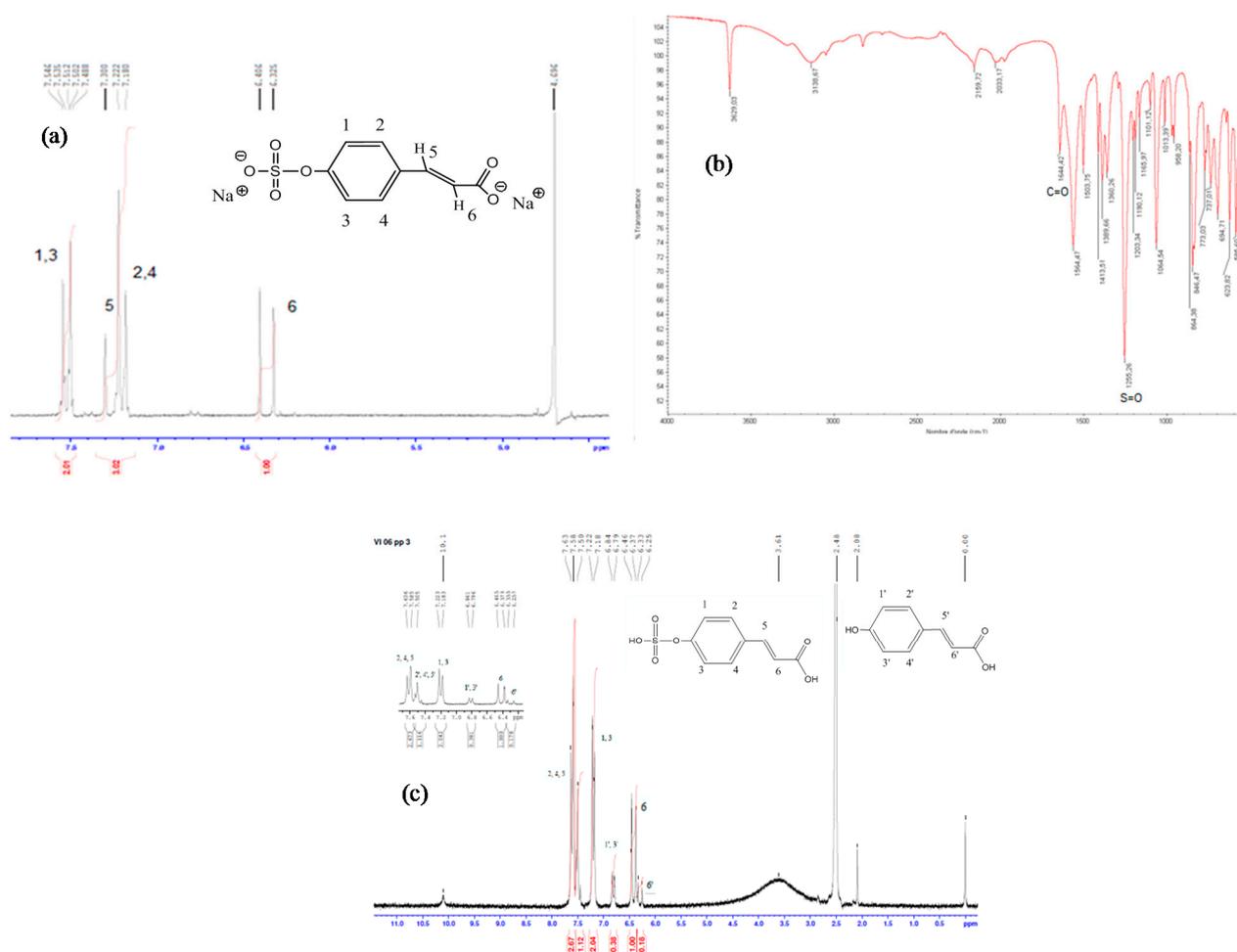
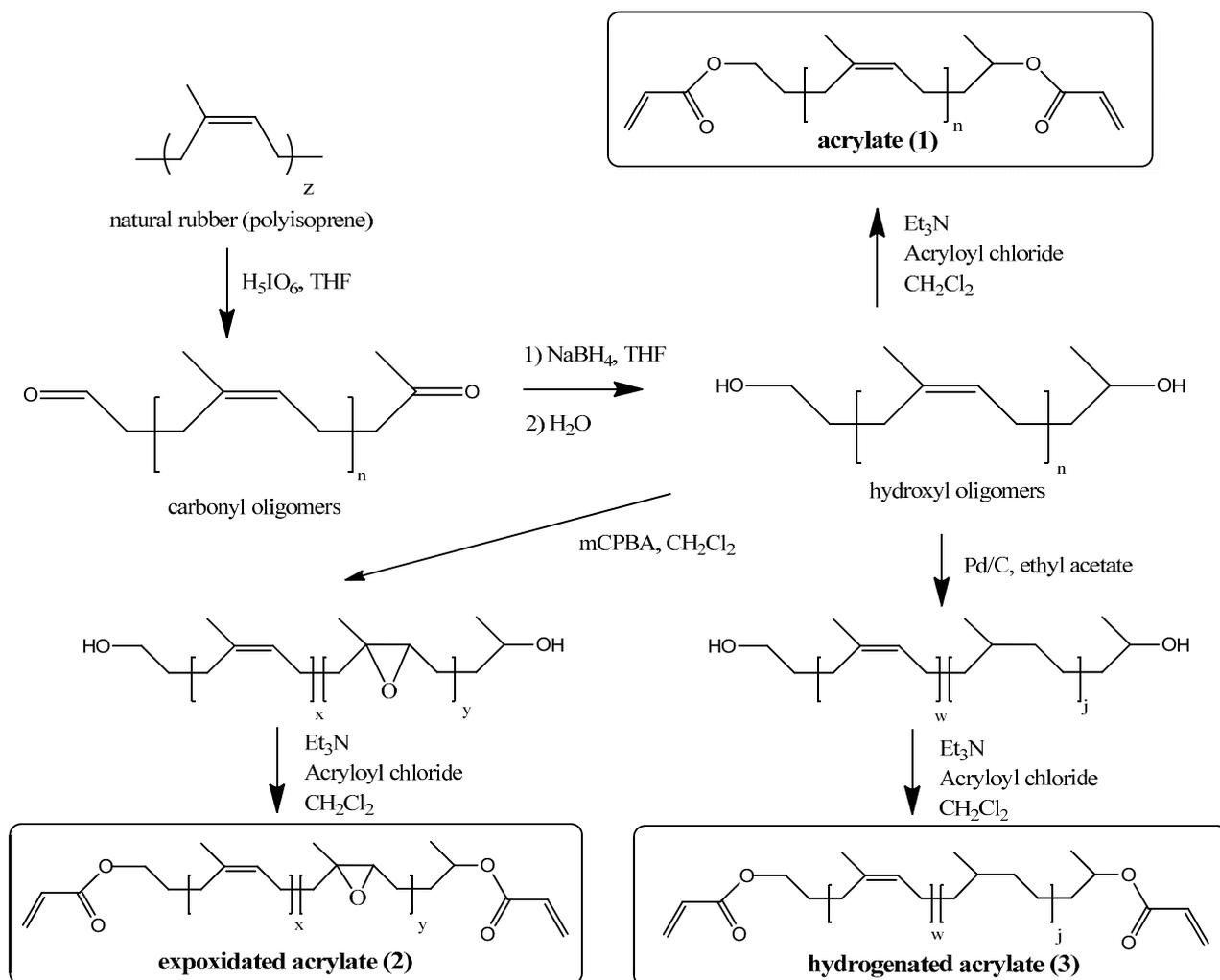


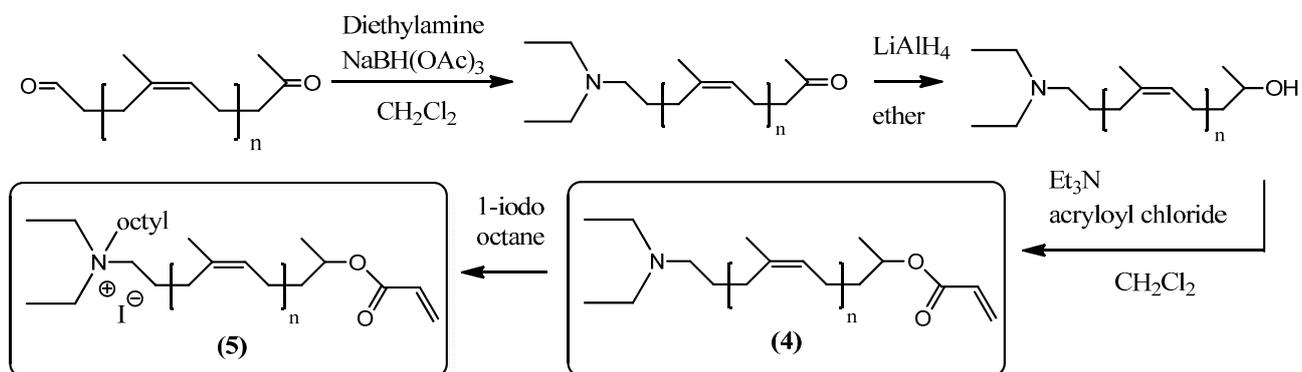
Table S1. Parameters relative to X-reflectivity curves reported in Figure S3.

Thin Samples	Ultrathin Samples	Thickness (Å)	Roughness (Å)
-	A	17	3.5
-	B	18	3
-	C	30	30 (dewetting)
-	D	18	3
R	-	463	49
W	-	418	45
X	-	442	51
Y	-	460	48
Z	-	443	41

Scheme S1. Synthesis of acrylate oligomer (1), of epoxydated acrylate oligomer (2) and hydrogenated acrylate oligomer (3).



Scheme S2. Synthesis of amine oligomer (4) and ammonium oligomer (5).



Scheme S3. Zosteric acid and zosteric acid disodium salt (ZAS) synthesis.

