

Controlling Silicone-Saccharide Interfaces: Greening Silicones

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Supporting Information

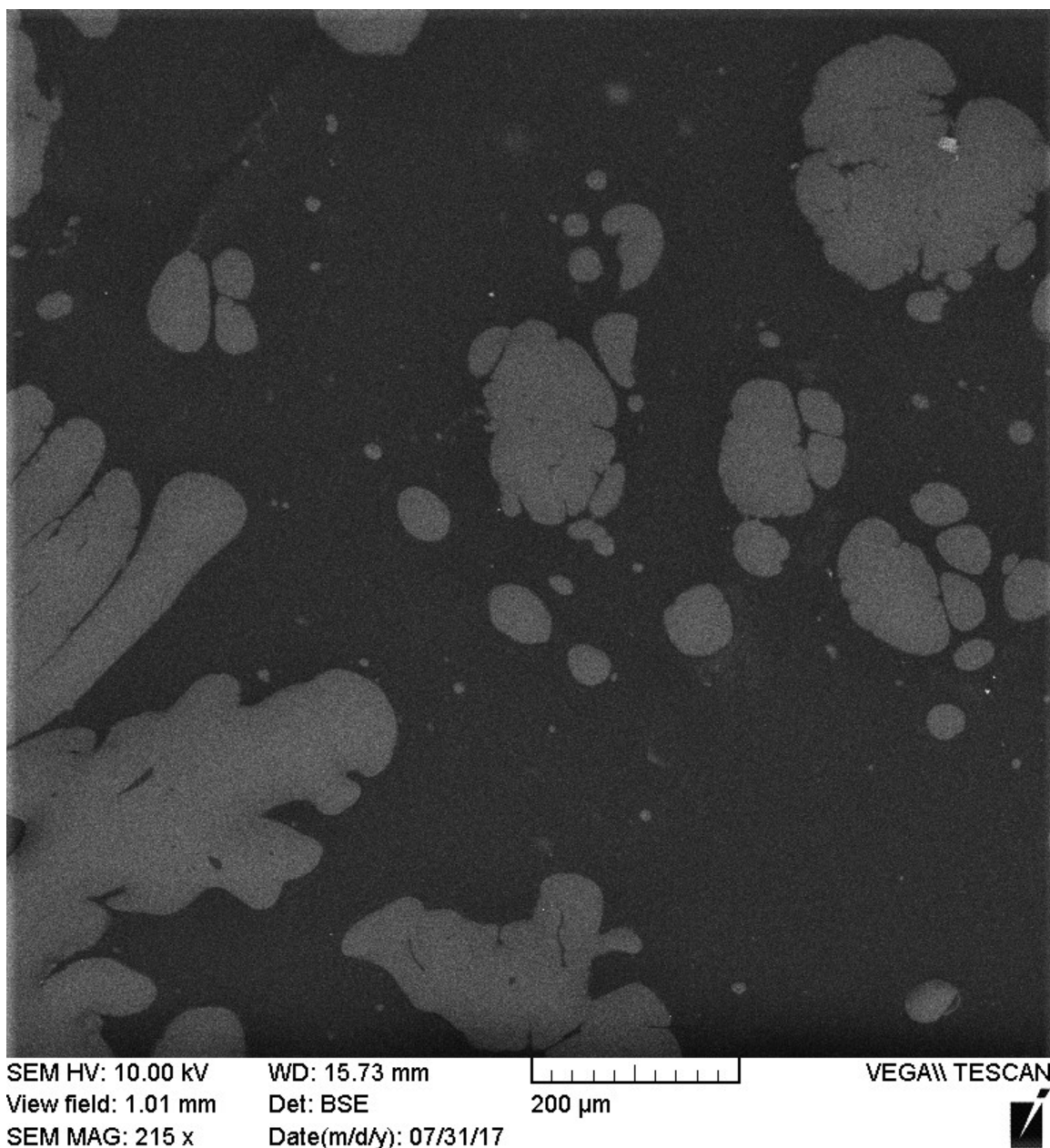


Figure S1: SEM image, after drying, of the 50:50 SiBA-17:phytglycogen paste showing that it is a coarse emulsion.

Telechelic Silicone Boronic Acid Elastomers	
Silicone Molecular Weight (Da)	Young's Modulus (MPa)
1135	0.171 ± 0.018
4512	0.154 ± 0.027
7485	N/A ^a
Pendant Silicone Boronic Acid Elastomers	
Boronic Acids per Siloxane Unit	Young's Modulus (MPa)
50	2.285 ± 0.023
15	2.192 ± 0.033
7	0.2149 ± 0.028
3	N/A ^a
Telechelic (SiBA-17) - Pendant (SiBA-P7) Mixtures	
Telechelic:Pendant Ratio of Mixture	Young's Modulus (MPa)
95:5	0.857 ± 0.070
80:20	0.634 ± 0.12
70:30	0.665 ± 0.075
60:40	1.144 ± 0.029
50:50	2.532 ± 0.16
40:60	4.629 ± 0.14
30:70	5.585 ± 1.20
20:80	2.793 ± 0.69
5:95	2.319 ± 1.10
Saccharide-Doped Silicone Boronic Acid Elastomers (SiBA-17)	
Saccharide (mol): Boronic Acid(mol)	Young's Modulus (MPa)
Sorbitol	SiBA-17 = 0.171 ± 0.018
0.5:1	0.111 ± 0.023
1:1	0.602 ± 0.051
1.5:1	0.353 ± 0.043
2:1	0.343 ± 0.095
Pullulan	

0.5:1	0.140 ± 0.030
1:1	0.106 ± 0.017
1.5:1	0.141 ± 0.060
2:1	0.108 ± 0.035
Glucose	
1:1	0.069 ± 0.027