

1   Supplementary Material

2

**Table S1.** pH of sunscreens and controls.

Sample	pH	Sample	pH
A1	6.69 ± 0.07	A3	6.33 ± 0.01
B1	6.64 ± 0.01	B3	6.04 ± 0.04
C1	6.30 ± 0.02	C3	6.08 ± 0.04
A5	4.95 ± 0.03	A7	4.84 ± 0.01
B5	6.22 ± 0.02	B7	6.11 ± 0.01
C5	6.20 ± 0.07	C7	6.17 ± 0.01
Control-OMC	6.45 ± 0.03	Control-O	6.11 ± 0.01
Control-OMC Si	6.45 ± 0.07	Control-O Si	6.18 ± 0.02
A2	6.54 ± 0.02	A4	6.35 ± 0.02
B2	6.31 ± 0.01	B4	6.11 ± 0.03
C2	6.16 ± 0.03	C4	5.96 ± 0.01
A6	5.02 ± 0.04	A8	4.86 ± 0.01
B6	6.34 ± 0.06	B8	6.11 ± 0.01
C6	6.17 ± 0.07	C8	6.17 ± 0.01
Control-H	6.67 ± 0.01	Control-OS	6.63 ± 0.01
Control -H Si	6.67 ± 0.01	Control-OS Si	6.54 ± 0.02

3

**Table S2.** Stability of creams.

Time point	A1		B1		C1		A2		B2		C2	
Temperature	25°C	45°C										
Day 1	-	-	-	-	-	-	-	-	-	-	-	-
Week 2	-	+	-	+	-	-	-	+	-	+	-	-
Week 4	-	+	-	+	-	+	-	+	-	+	-	+
Week 6	-	++	-	++	-	++	-	++	-	++	-	++
Week 8	-	-	-	-	-	-	-	-	-	-	-	-
Week 10	-	-	-	-	-	-	-	-	-	-	-	-
Time point	A3		B3		C3		A4		B4		C4	
Temperature	25°C	45°C										
Day 1	-	-	-	-	-	-	-	-	-	-	-	-
Week 2	-	+	-	+	-	-	-	+	-	+	-	-
Week 4	-	+	-	+	-	+	-	+	-	+	-	+
Week 6	-	++	-	++	-	++	-	++	-	++	-	++
Week 8	-	-	-	-	-	-	-	-	-	-	-	-
Week 10	-	-	-	-	-	-	-	-	-	-	-	-

Coding: -: no change, +: slightly noticeable change (i.e., reversible separation), ++: significant change (i.e., irreversible separation); A: alkenones, B: beeswax, C: cetyl alcohol,

1: OM cinnamate, 2: Homosalate, 3: Octocrylene, 4: Octyl salicylate.