

Supplementary Information

Chitosan-Sodium Alginate Polyelectrolyte Complex Coating Pluronic® F127 Nanoparticles Loaded with Citronella Essential Oil

Mariele P. Sanches,^a Idejan P. Gross,^a Rodrigo H. Saatkamp,^a Alexandre L. Parize^a and Valdir Soldi *,^{a,b}

^aGrupo de Estudo em Materiais Poliméricos (Polimat), Departamento de Química, Universidade Federal de Santa Catarina, 88040-900 Florianópolis-SC, Brazil

^bInstituto Brasileiro de Tecnologia do Couro, Calçado e Artefatos (IBTeC), 93334-000 Novo Hamburgo-RS, Brazil

Table S1. Citronella essential oil chromatographic profile obtained from GC-MS analysis

Peak number	Retention time / min	Relative percentage / %	Compound name
1	8.5	3.9	D-limonene
2	13.2	63.5	citronellal
3	16.3	7.5	citronellol
4	17.4	14.5	β -pinene
5	22.8	2.6	3-carene
6	23.1	1.9	β -D-elemene
7	28.4	2.0	D-cadinene
8	29.4	3.7	cycloheptane,4-methylene-1-methyl-2-(2-methyl-1-propen-1-yl)-2-vinyl

*e-mail: soldi.valdir@gmail.com

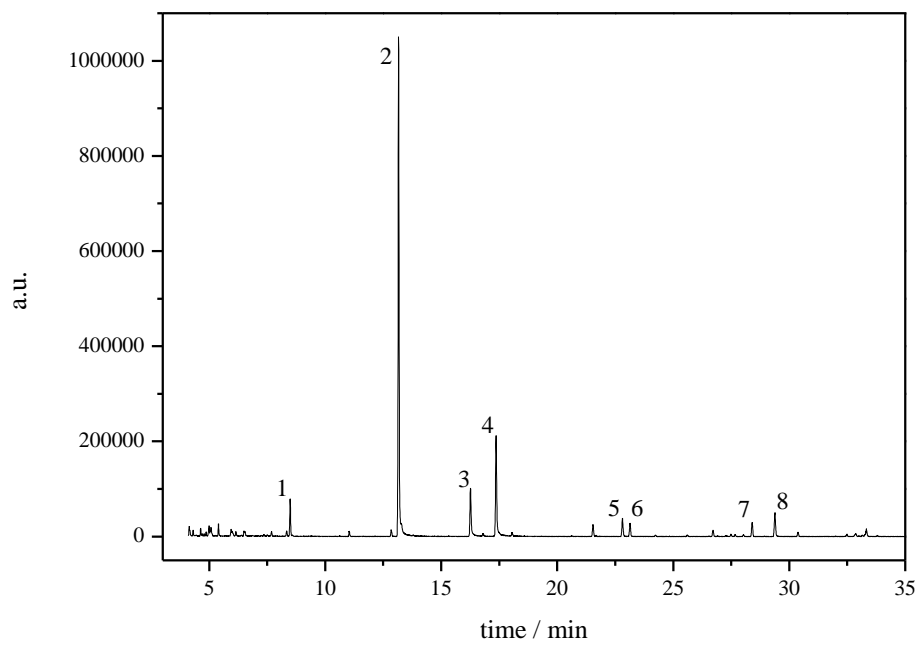


Figure S1. Chromatographic profile for citronella essential oil (CEO). The numbers correspond to the peak number in Table S1.

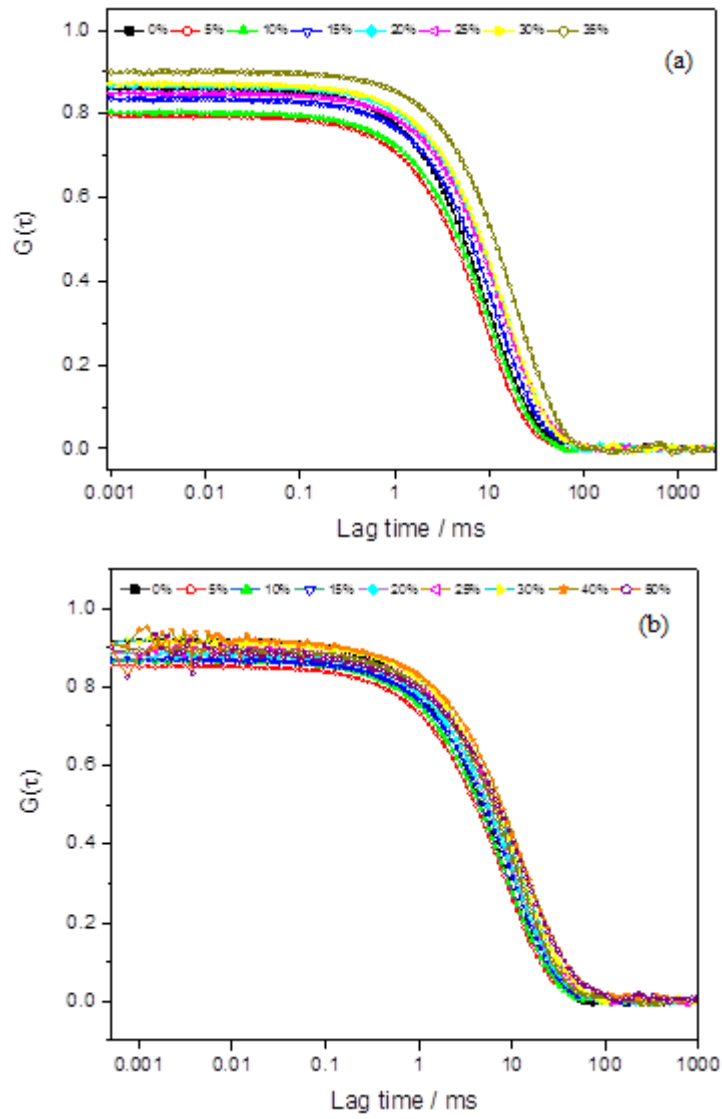


Figure S2. Correlation curves obtained from DLS data for Pluronic® F127 micelles loaded with citronella essential oil (a) and Pluronic® F127 micelles loaded with CEO covered with chitosan-sodium alginate (b).

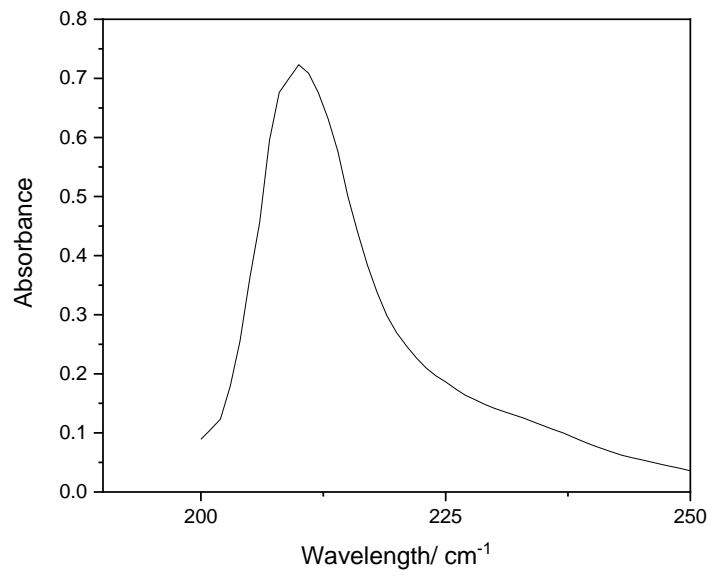


Figure S3. UV-Vis absorbance curve for CEO encapsulation efficiency calculation.

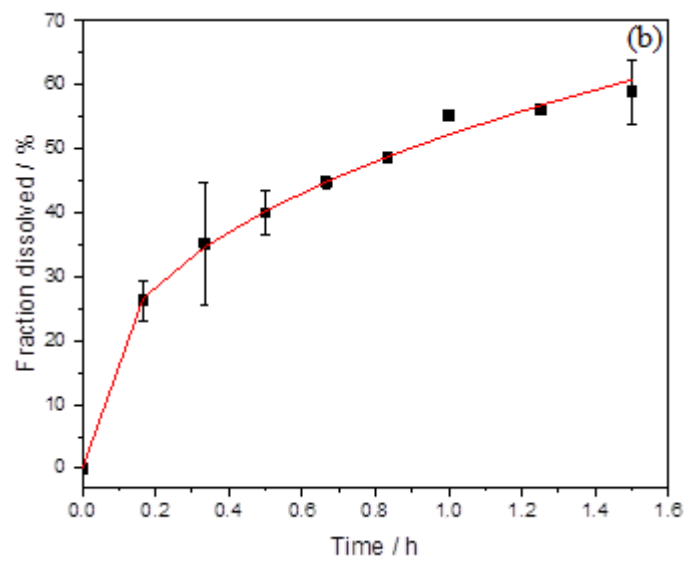
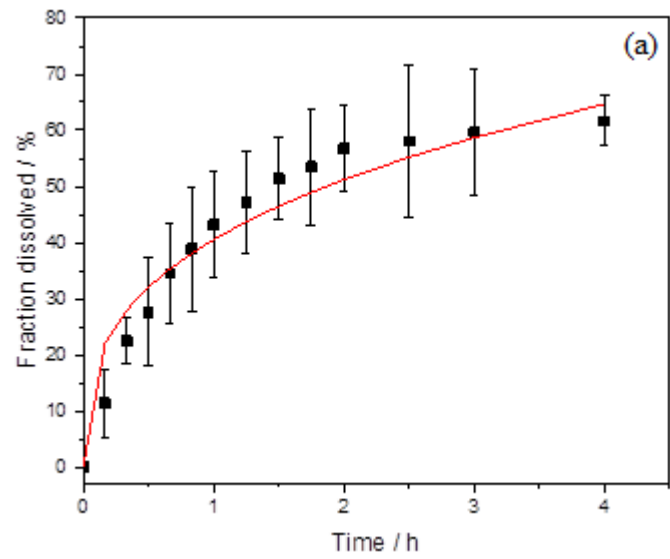


Figure S4. (■) Observed and (—) predicted data according to the Korsmeyer-Peppas mathematical model for PBS 20% ethanol (a) and simulated sweat fluid (b) release media.

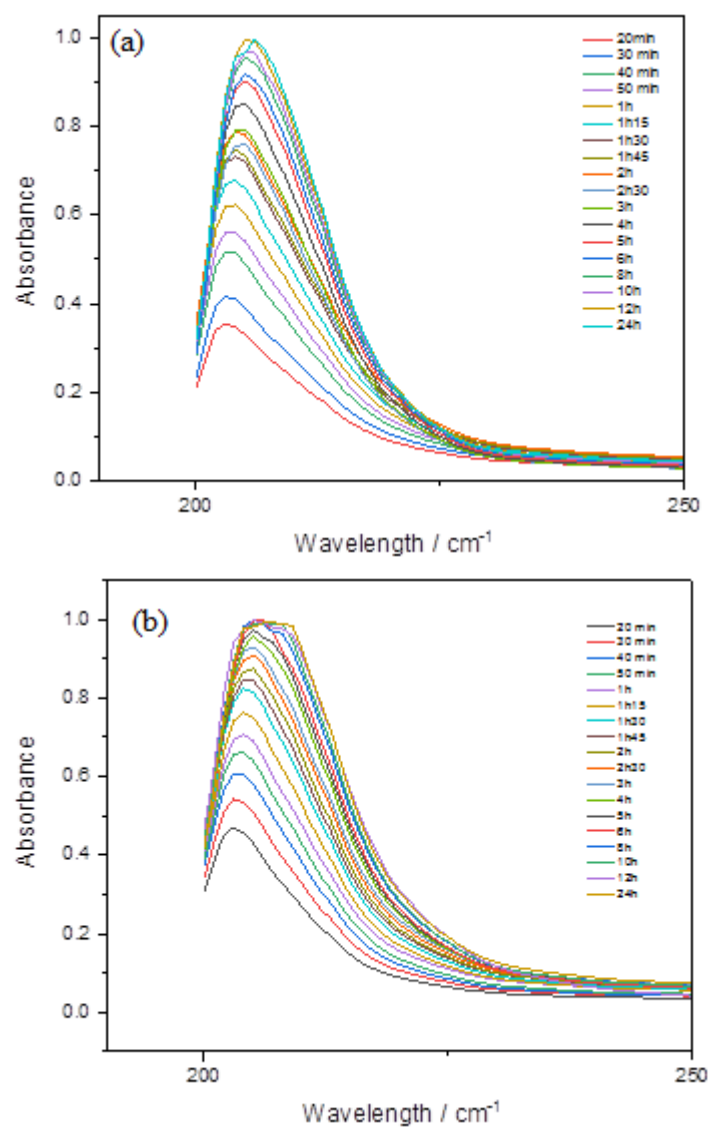


Figure S5. UV-Vis absorbance curves for CEO release: (a) PBS and (b) sweat media.