materials

MDPI

Supplementary Material

Antibacterial Textile Based on Hydrolyzed Milk Casein

Kedafi Belkhir [1], Caroline Pillon [2,3,4], Aurélie Cayla [1] and Christine Campagne [1,*]

[1] ENSAIT, GEMTEX—Laboratoire de Génie et Matériaux Textiles, F-59000 Lille, France; kedafi.belkhir@centralelille.fr (K.B.); aurelie.cayla@ensait.fr (A.C.)
[2] Université de Lyon, F-42023 Saint Etienne, France; caroline.pillon@univ-st-etienne.fr
[3] CNRS, UMR5223, Ingénierie des Matériaux Polymères, F-42023 Saint-Etienne, France
[4] Université Jean Monnet de Saint Etienne, F-42023 Saint-Etienne, France
* Correspondence: christine.campagne@ensait.fr

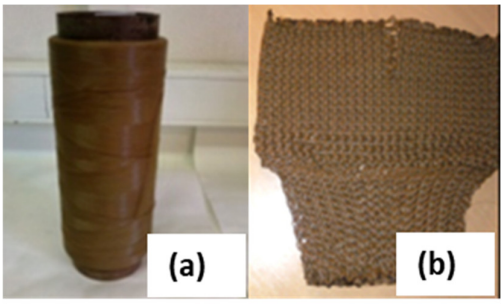

Figure S1. (**a**) The yarn obtained by melt spinning of PP containing 5 wt.% hydrolyzed casein. (**b**) The knit made of the yarn.

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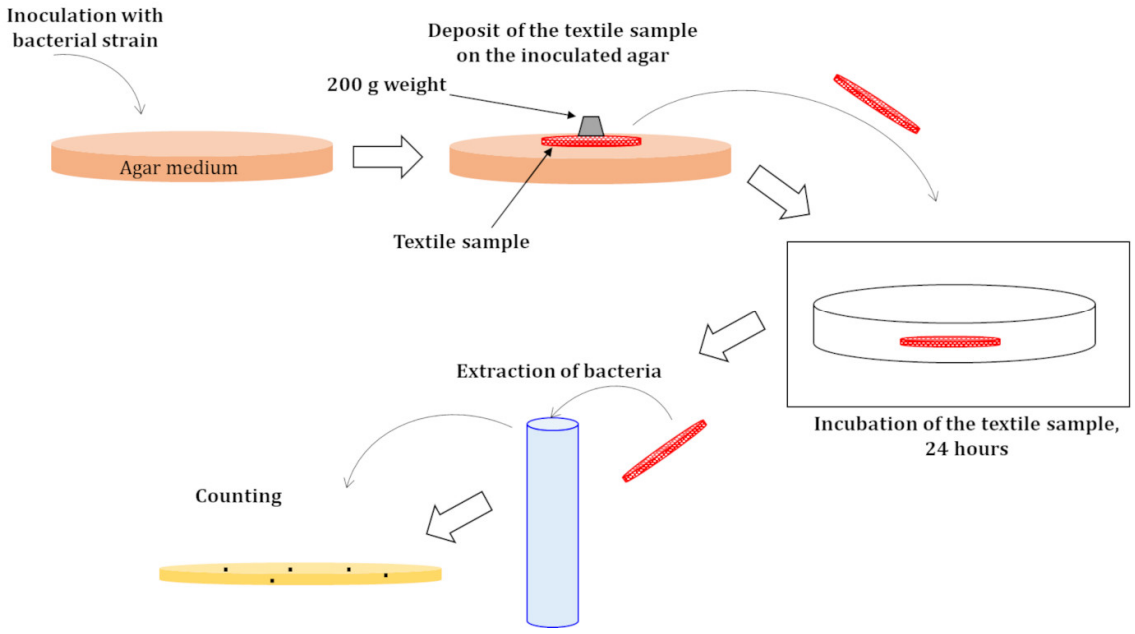

Figure S2. Schematic representation of the followed steps during the antibacterial tests, according to the ISO 20743 §8.2 (2013) norm.

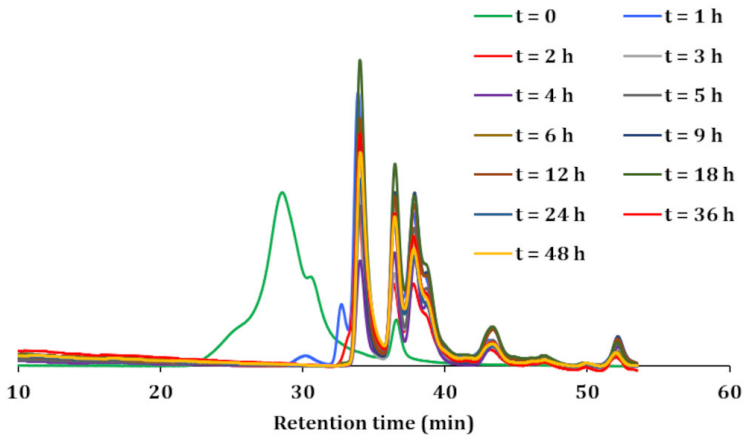

Figure S3. SEC traces casein at different times of hydrolysis.

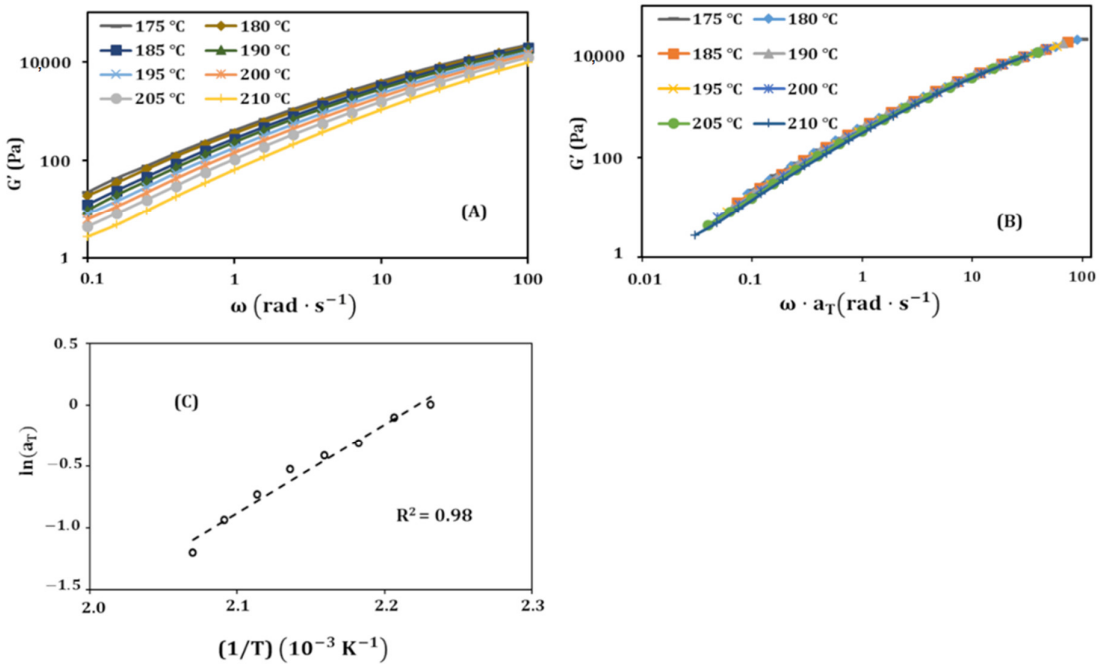

Figure S4. Neat PP rheological study. (**A**) Storage modulus at different temperatures. (**B**) Superposition of G′ using a thermal shift factor aT. (**C**) E_a determination from the plot of ln(a_T) versus (1/T).

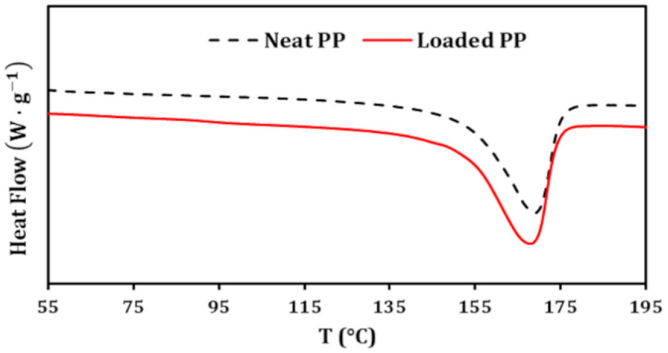

Figure S5. DSC curves corresponding to the first heating ramp, for neat PP and 5 wt.% loaded one.

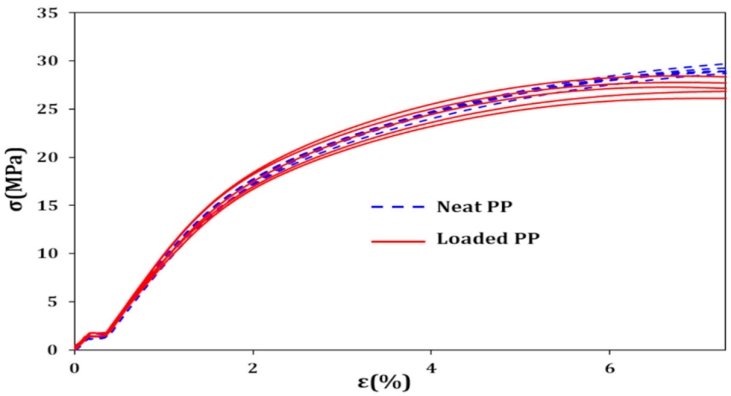

Figure S6. Stress-strain curves, from tensile tests, for the neat PP (five runs) and the PP loaded with 5wt.% hydrolyzed casein (five runs).

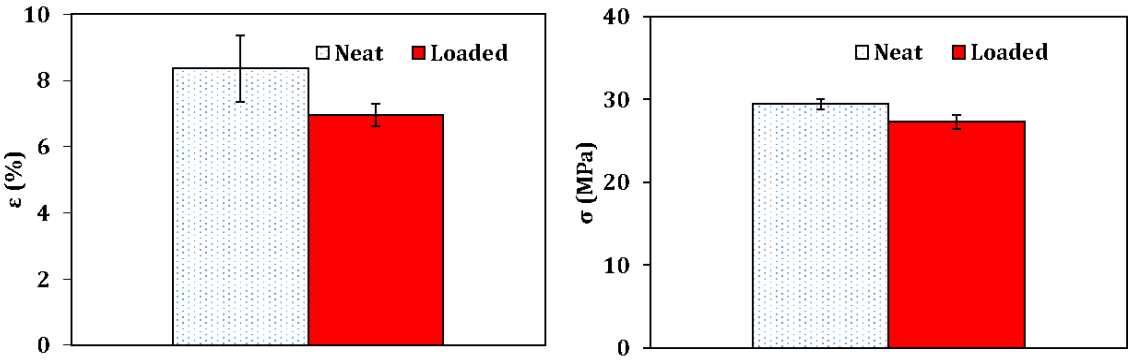

Figure S7. Strain (ε) and stress (σ) values from tensile tests achieved on dumbbells of neat PP (Neat) or 5 wt.% hydrolyzed casein loaded PP (Loaded).