

Supplementary Materials:

Comparison of the Technical Performance of Leather, Artificial Leather, and Trendy Alternatives

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Microscopic pictures of all investigated samples; cross sections and surfaces; 50-time magnification.

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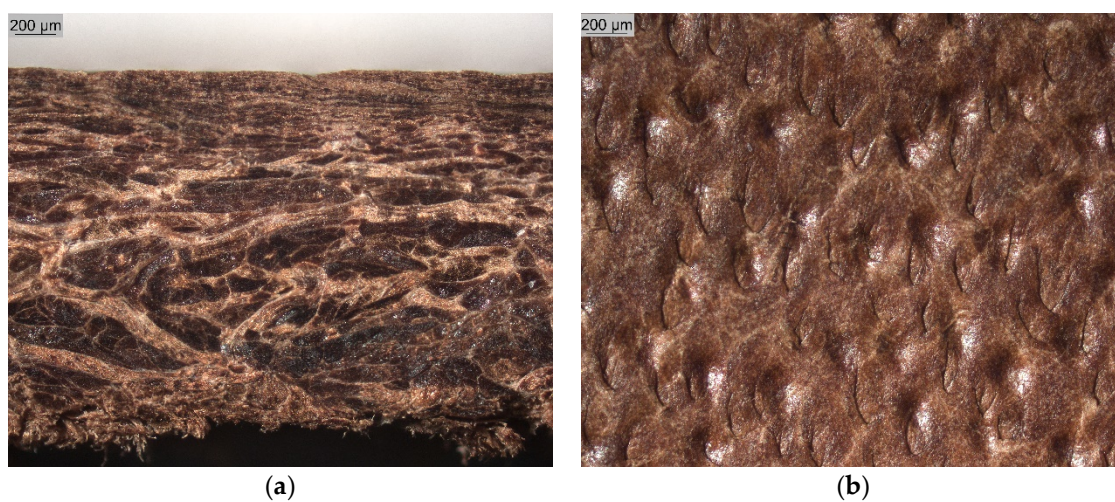


Figure S1. Sample Shoe upper leather; (a) cross section, (b) surface.



Figure S2. Sample Muskin®; (a) cross section (25 times magnification), (b) surface.

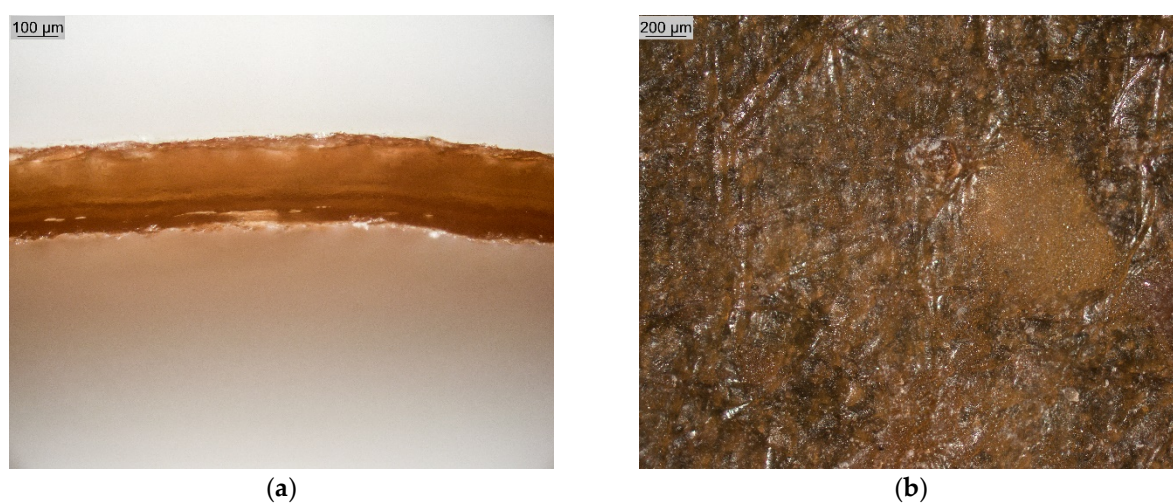


Figure S3. Sample Kombucha; (a) cross section (100 times magnification), (b) surface.

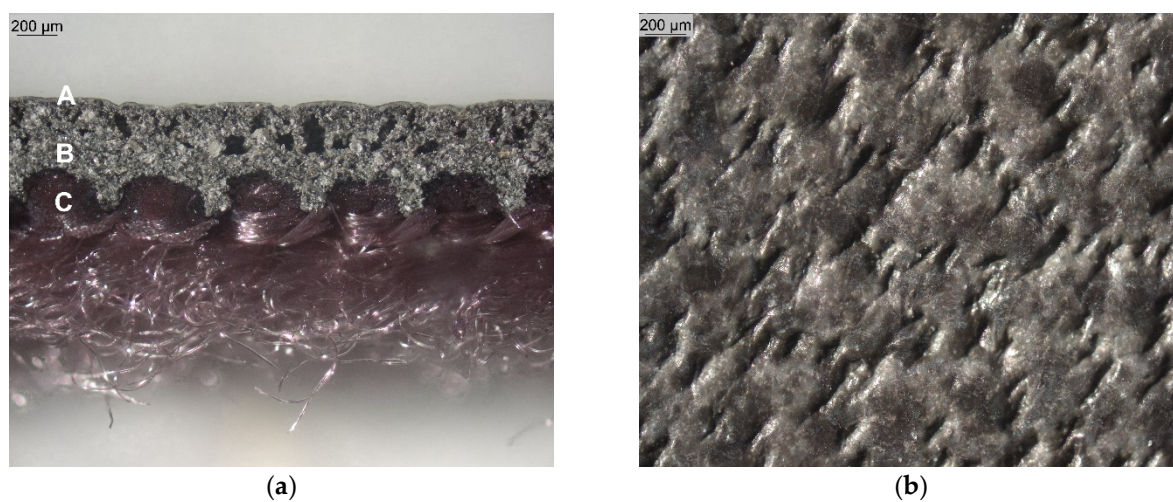


Figure S4. Sample PUR-coated textile; (a) cross section, A: thin compact top layer, B: foamed layer, C: textile carrier, (b) surface.

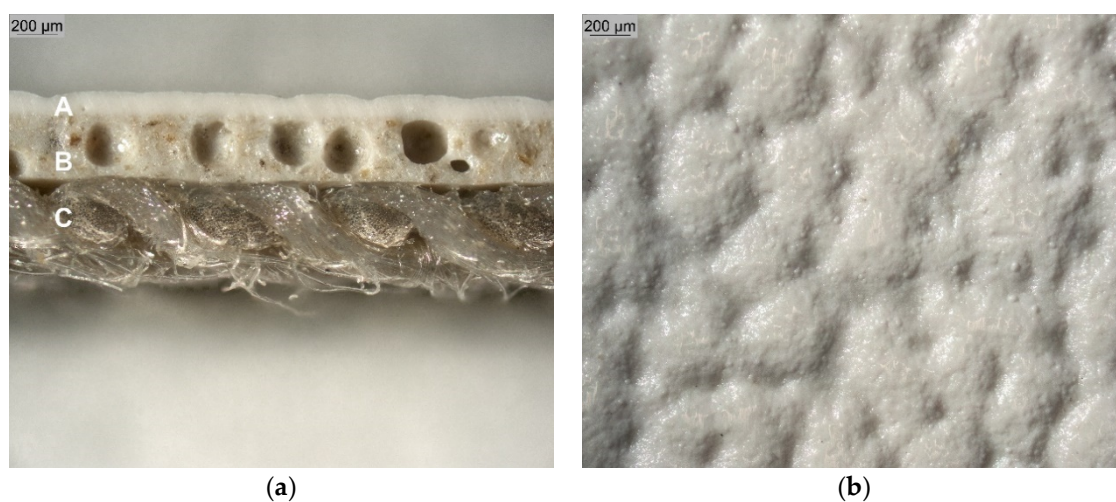


Figure S5. Sample Desserto®; (a) cross section, A: compact top layer, B: foamed layer, C: textile carrier, (b) surface.

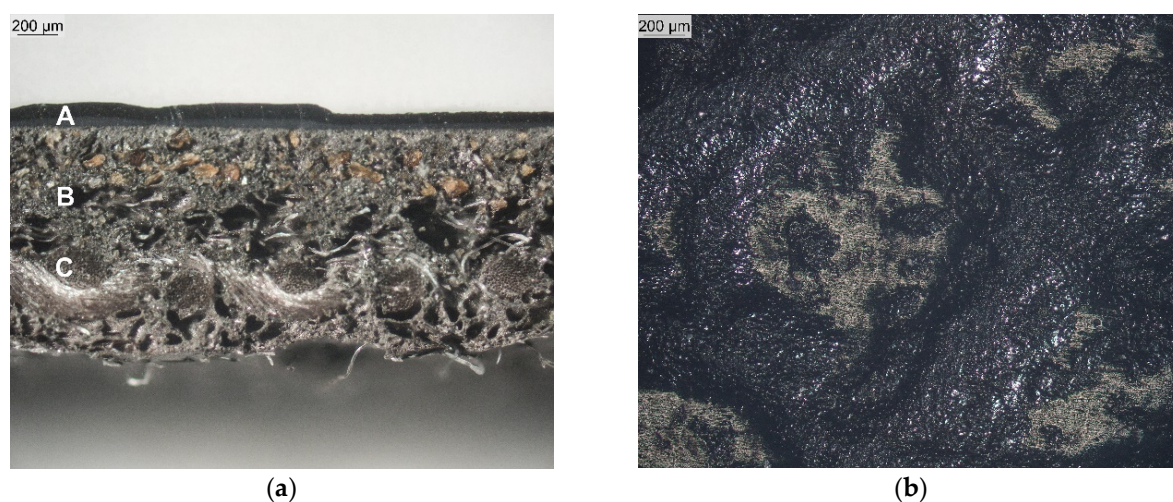


Figure S6. Sample AppleSkin®; (a) cross section, A: compact top layers, B: foamed layer, C: impregnated layer with a textile carrier, (b) surface.

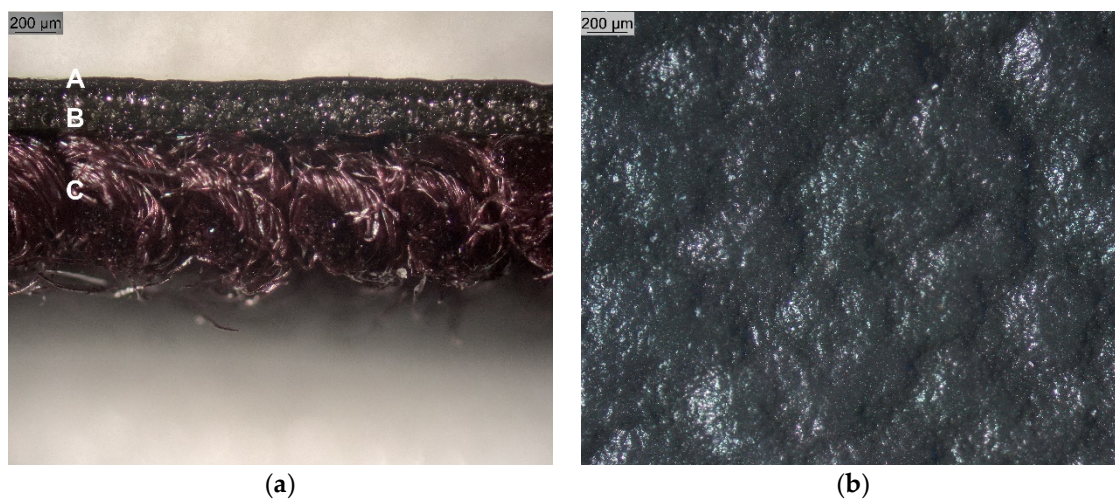


Figure S7. Sample Vegea®; (a) cross section, A: compact top layer, B: foamed layer, C: textile carrier (b) surface.

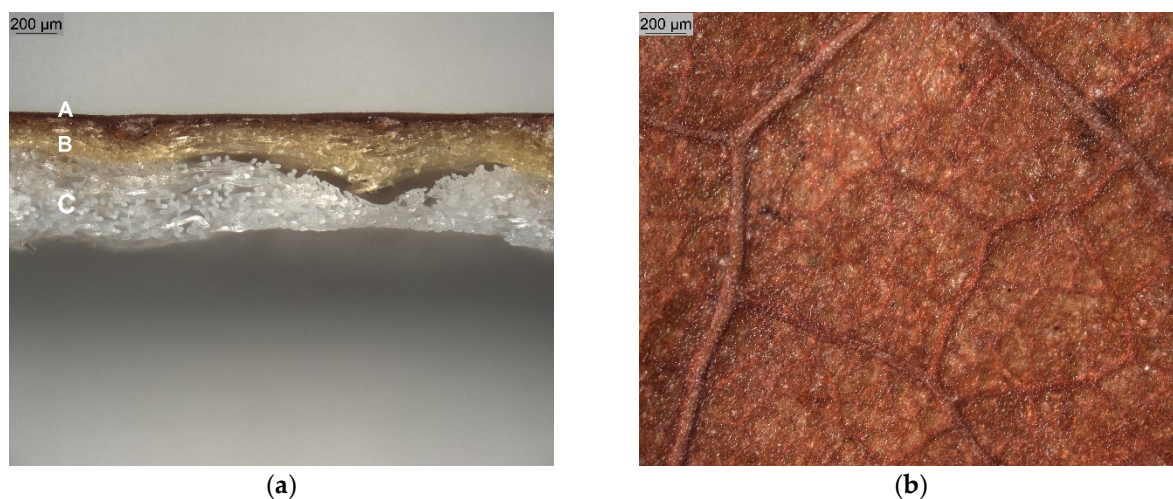


Figure S8. Sample Teak leaf®; (a) cross section, A: leaf with a transparent top layer, B: textile layer 1, C: textile layer 2, (b) surface.

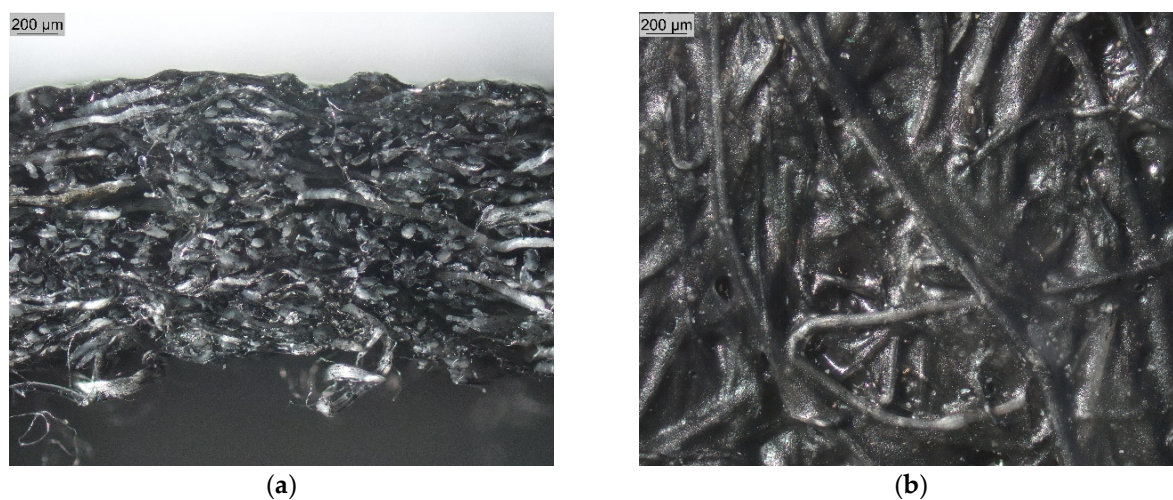


Figure S9. Sample Pinatex®; (a) cross section, non-woven with compact top layer, (b) surface.

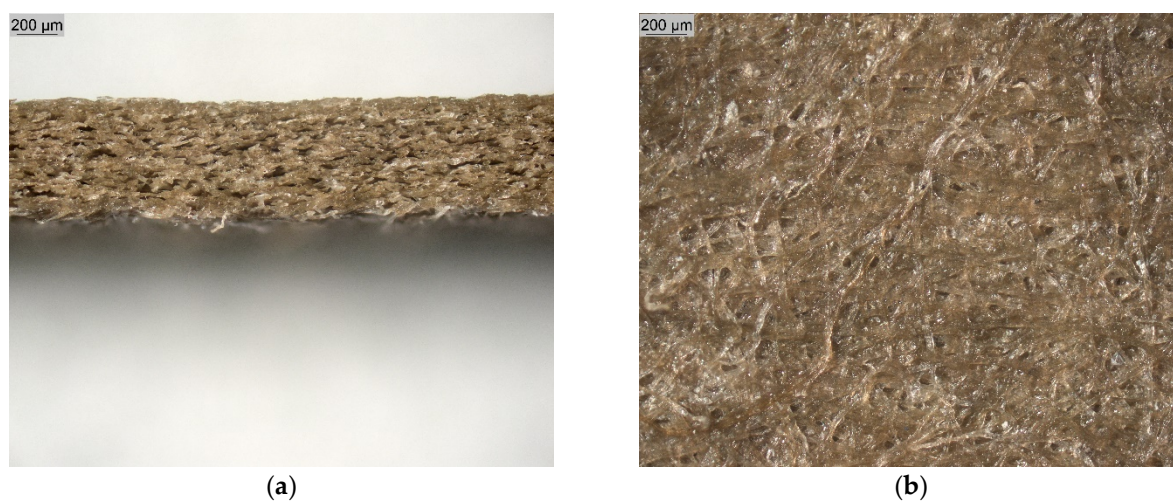


Figure S10. Sample SnapPap®; (a) cross section, (b) surface.

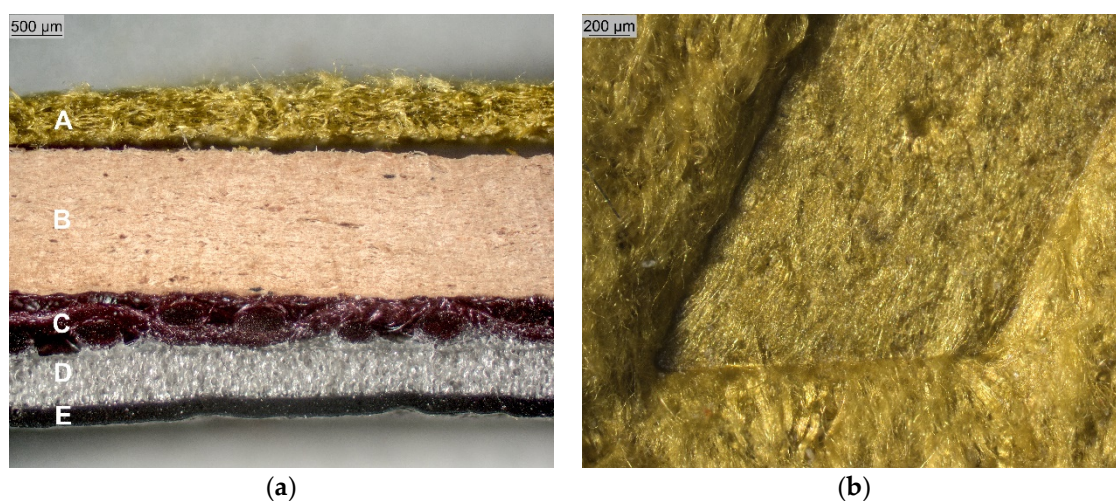


Figure S11. Sample Noani®; (a) cross section (25 times magnification), A: microfibre layer, B: leather board layer, C: textile carrier, D: foamed layer, E: compact layer, (b) surface, embossed region.

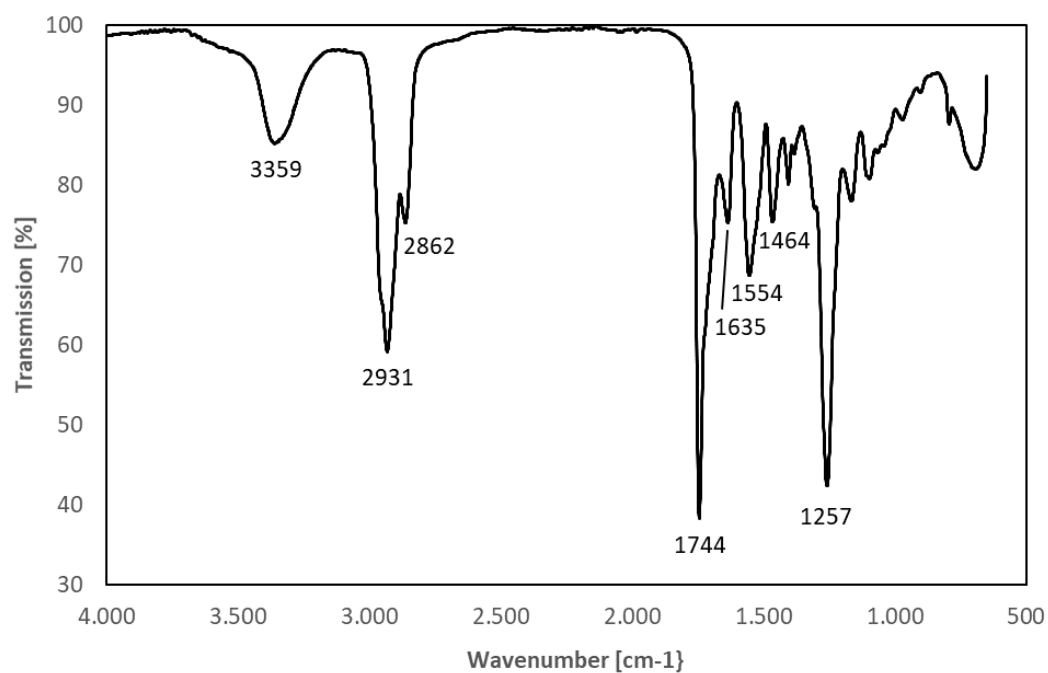


Figure S12. FTIR spectrum of Desserto® as an example of a PUR-coated material with typical molecular vibrations (3359 NH; 2931 CH₂; 2862 CH₂; 1744 C=O; 1635 O=C-NH; 1554 Amid; 1464 CH₂; 1257 C-O-C).