



MONDIN

non-animal biosourced material for the luxury goods industry from wine production by-products

Animal leather is currently subject to a lot of debate over the health risks caused by the use of chromium III in the tanning processes and growing consumer demand for more sustainable and respectful solutions (ethical activism, veganism, etc.). Consequently, alternatives have recently emerged in the form of plant-based leathers (made from pineapple, mushroom, rubber, tea, algae, apple, grape).

Carnot 3BCAR Institute

Scientific/technological breakthrough

CRT CATAR, which is part of the Carnot 3BCAR Institute, has partnered the start-up Mondin in developing and optimising a new material derived from local wine biomass with a high added value image, reflecting a touch of French class. The biomass is first transformed and processed before being incorporated into a bioplastic material and extruded into sheets or films of varying thicknesses. This research has made it possible to develop bioplastics that comply with various expected mechanical and sensory qualities. The final optimisation phase will focus on colour and surface texturing to be able to offer manufacturers a wide range of products, depending on their use (leather goods, jewellery, watches, cars, etc.).



Competitive advantage for the economic stakeholders

This material does not need to be applied to a fabric and may be worked on directly, i.e., cut, glued, sewn, riveted. Preparation of the plant filler lends the end material a very nice appearance that requires very little finishing, thereby limiting chemical inputs (PU or PA resins). This is a resolutely modern material that has found a natural home in the luxury goods industry where prototypes are already being evaluated. It is presented not as an alternative to animal leather, but as a new solution that complies with mechanical and sensory standards and current environmental (local biomass recovery, optimum bio-based content) and ethical criteria (animal exploitation).

Partnership

- MONDIN specialises in recovering grape marc (i.e., pulp) from French vineyards as a more responsible alternative to materials such as leather and other textiles.

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