

SNAIL SLIME BASED POLYMER FILMS

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The invention refers to novel films based on natural and/or semi-synthetic polymers containing snail slime, to be applied on skin, mucosae or nails, for applications in cosmetics, pharmaceuticals and veterinary.

Protection: International

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INVENTION

The innovative films are obtained by **solvent casting** of a solution containing snail slime in appropriate concentrations mixed with **polymeric solutions**. Renowned for its functional properties, the snail slime reduces rigidity and fragility of the films, while drastically enhancing film ductility, flexibility, stretching and adhesiveness. Consequently, the fruit of the research is **extremely versatile** and adaptable to the different applications it was designed for.

The final product is an adhesive film for mucosae, skin (**patch-non patch**) or nails which does not release microplastics in the environment unlike other existing solutions on the market. In addition, films containing snail slime are **edible** and thus suitable for applications in food packaging.

ADVANTAGES

- Easy scaling up of the method;
- No solvents used other than water;
- Basic matrix versatility for a specific use;
- Green solution preventing from microplastics release in environment;
- Fully biodegradable.

APPLICATIONS

- Cosmetics, e.g. anti-cellulite bandages, anti-wrinkle and moisturizing films, anti-aging and anti-stretch mark treatments;
- Pharmaceuticals, e.g. healing patches/films, antibacterial, antifungal, anesthetics drugs and painkillers.
- Food, e.g. food packaging

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