



**RHEOLOGY**

Get inspired by our  
**IMPAG Lab**  
formulations



*Rheology (from Ancient Greek ῥέω rheo, meaning 'flow', and λόγος logos, meaning 'study of') is the science that deals with the deformation and flow of materials, both solids and liquids.*

<https://en.wikipedia.org/wiki/Rheology>

## The application as an experience

The rheological properties of cosmetics influence the user's perception of a product and, by adjusting the rheology, the application of a care product can be turned into a true pleasure.

Consumers enjoy the sensation of a beautifully flowing shampoo, for example, or of a cream that spreads easily. Even toothpaste is expected to behave predictably when squeezed out of the tube, and to stay obediently on the toothbrush instead of dropping off.

In order to control parameters such as viscosity, thickness, film formation, or emulsion stability, plastic components are added to virtually all kinds of cosmetic products in the form of polyacrylates, Nylon-12/6, or carbomers.

Effective, biodegradable substances also exist, however, as environmentally friendly alternatives to synthetic ingredients.

Our **Natural Hemp Serum**, for example, is a COSMOS compliant hydrogel entirely free from plastic-based thickeners. Thanks to a clever combination of natural thickeners, it pampers the user with a soft and luxurious feel to the skin. Containing a raw material obtained from hemp, as revealed in the name, this formulation also allows the product to be positioned in the trendy market segments.



Our SPF 30 **Mineral Sun Lotion** is a low-viscosity lotion that spreads easily and leaves no white streaks on the skin. Instead of regulating viscosity with environmentally harmful plastic-based thickeners, this formulation stabilizes the sun lotion using hectorite clay.

