



How to MAKE A SHAMPOO PASTE

Carole Gherardi explains how to formulate a shampoo paste using IFF's conditioning biopolymer Aurist AGC



Carole Gherardi, Global Market Segment Lead Actives, IFF

Growing consumer awareness of environmental sustainability and the desire for more effective and convenient products have led to a surge in interest in waterless formats.

Recent reports from Mintel indicate that a significant percentage of consumers, especially from the younger generation, are embracing waterless beauty products like solid bars and sticks. However, formulating waterless formats poses several challenges. For instance, formulating powder formats will limit the use of liquid ingredients, thus reducing the ingredient selection, and often require higher concentration of preservatives. On the other hand, formulating solid formats requires careful control of the cooling curve to prevent crystallisation and attention to storage conditions to prevent cracking (dry condition) or softening (humid condition).

An innovative approach that can serve the best of both worlds is a concentrated format that contains less than 15% water. In this article, IFF explores how to create a concentrated shampoo paste that has about 55% less water than regular liquid shampoo.

Creating a product with such low water content while maintaining a non-solid form requires a specific approach. The key is to create a slurry paste

This water-efficient product format meets the rising consumer demand for sustainable and effective shampoo options



using glycerin and surfactants, which together form the base structure. Glycerin acts as a humectant and can help to retain moisture in the hair and scalp, while also forming the paste's structure. Surfactants are essential for cleansing and contribute to the texture of the paste, while providing a nice creamy lather. Sodium cocoyl isethionate has been selected as the main surfactant for its good foaming properties, high naturality and powder form adapted to the solid or paste forms.

Determining the right ratio of glycerin to surfactant is crucial to achieving the perfect consistency – not too soft, not too hard. The addition of coconut oil improves the texture of the paste by enhancing its softness and providing a shiny appearance, while also delivering lipids to nourish the hair fibres.

Once this base is established, you can add various ingredients for the desired benefits. We have selected IFF active ingredients Genencare OSMS BA natural betaine and Genencare OSMS MI natural inositol for hair strengthening and scalp care. The addition of readily biodegradable cationic conditioning biopolymer Aurist AGC helps improve hair manageability and combing. Charcoal powder is included for its purifying properties, making the shampoo suitable for greasy hair types. The aesthetic result is a profound black colour, beautified with gold glitters for a cosmic look.

The IFF fragrance selected for this shampoo paste is Space Rose, a reinterpretation of a living rose in the depths of space. The soft, pink, velvety petal texture harmoniously contrasts with the cold and dark environment made by fizzy aldehydes and a complex spice blend.

Suitable for all hair types, ranging from normal to greasy scalp, this concentrated shampoo offers excellent cleansing and conditioning in a compact, water-efficient format.

Wet hair thoroughly. Depending on hair length, scoop out a coin-sized amount of paste into your damp hand. Massage the paste between hands to generate foam. Apply the foamy paste to the scalp and massage it in with your fingertips. Work the lather along the hair shaft through to the ends. Rinse well and repeat if desired.

Concentrated shampoo paste provides a practical solution for formulators aiming to develop performance-oriented and convenient alternatives to traditional liquid shampoo. This low-water product format aligns with growing consumer demand for more sustainable and effective shampoo options through reducing the water content and maximising the use of biodegradable ingredients.

Additionally, concentrated shampoo addresses challenges associated with formulating waterless products, such as managing ingredient compatibility and ensuring product stability.

By embracing this innovative concentrated format, formulators can deliver hair care solutions that meet modern consumer expectations ●