How to...
MAKE AN IN-SHOWER LOTION

Alomgir Ali discusses how to formulate this time-saving solution with IFF's Aurist AGC, a readily biodegradable cationic biopolymer

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There has been a shift in consumers' spending habits toward experience-driven purchases of material goods. As a response to the demands of a contemporary lifestyle characterised by a fast-paced environment, consumers are reinventing their beauty and personal care routines. However, this extends beyond mere practicality. Consumers now expect a profoundly enriching and enjoyable experience from their beauty and personal care products and routines.

Rather than perceiving these as obligatory tasks, individuals search for products that go beyond the mundane to liberate the senses, seeking a more fulfilling and sensorial daily experience.

Body care has become an increasingly popular trend in recent years and can be seen as a fantastic platform to innovate on this concept. According to Mintel, the most common body care application time is after bathing/showering and brands can take advantage of this by creating innovations within the area of wet skin-specific products.

One example is in-shower body lotions, which offer an excellent opportunity to play in this growing market as an innovative format. These products act as a convenient and effective way to moisturise the skin while showering. As assumed from their name, they are applied in-shower to wet skin after cleansing, and then rinsed off, leaving skin more hydrated and conditioned.

However, formulating an innovative in-shower lotion can be challenging, as it requires a balance between sensory, performance and stability. Poorly formulated lotions can be perceived by the consumer as cheap, ineffective or gimmicky based on factors such as viscosity, sensory profile and texture.

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Moreover, the lotion needs to deliver effective moisturisation, without leaving a sticky or greasy residue on the skin or the shower floor.

Aside from emollients, the standard conditioning ingredients for in-shower lotions are cationic polymers, which are macromolecules that bear positive charges, allowing them to bind to the negatively charged skin surface and form a thin film that moisturises and smooths the skin.

However, most of the cationic polymers currently available in the market have drawbacks that limit their use and performance when creating innovative products, such as issues of turbidity or the requirement to neutralise, disperse or hydrate.

Most cationic polymers tend to increase the viscosity of a formulation, which becomes especially difficult when trying to find the perfect sensory profile, as well as an appropriate amount of conditioning.

Apart from these drawbacks, cationic polymers can have further issues, such as non-biodegradability, irritation or strong, fishy odour.

To address these challenges, a new readily biodegradable cationic biopolymer has been developed by IFF, called Aurist AGC, using the proprietary DEB (Designed Enzymatic Biopolymers) technology. This platform uses enzymes to create new-to-the-world ingredients from renewable polysaccharides, based on specific unmet needs or gaps in the market.

Aurist AGC (INCI: Water (and) alpha-glucan hydroxypropyltrimonium chloride (and) propylene glycol) aims to break the tradeoff between performance and sustainability that incumbent materials currently suffer with.

With regards to formulation, it is a pourable, amber liquid and therefore does not need to be dispersed with high shear and can be added at any point in the formulation, with no requirement to hydrate or neutralise. It is widely compatible with most personal care ingredients and it also has no effect on the viscosity of the formulation, which is why it can be used to create interesting formats, such as sorbets, gels, or mousses, without compromising the texture or sensory profile.

The potential of Aurist AGC is demonstrated in an in-shower body lotion formulation with a sorbet-like format that can be formulated easily due to the benefits that Aurist AGC offers. The result is a high peaking gel-like sorbet texture with extra moisturising and energising claims attributed to active ingredients such as betaine and inositol.

Aurist AGC opens up opportunities that were previously difficult to approach in the conditioning and care space, by acting as an easy-to-formulate, sustainable and non-irritating conditioning polymer that can be added to most formulations without affecting the sensory and texture that you worked so hard to perfect ●