

Kem BS

INCI composition: *Water*
Potassium Sorbate
Sodium Benzoate

Appearance: Clear pale yellow liquid

Description

Kem BS is a mild preserving system with broad spectrum efficacy based on food-grade preservatives that represents a gentle on skin and effective alternative to parabens. Suitable for use in a wide variety of cosmetics with acidic pH up to 5.5, it is globally approved without restrictions in rinse-off and leave-on applications. All the ingredients are nature-identical, approved for use in natural & organic cosmetics according to the major certification standards (Ecocert, Soil Association, BDIH, ICEA/AIAB, COSMOS, NaTrue).

Antimicrobial activity

Kem BS is a balanced combination of the antibacterial/antifungal properties of sodium benzoate with the antifungal action of potassium sorbate, providing a broad spectrum blend effective against bacteria with particular high activity on yeasts and molds. Since it is based on salts of organic acids, which are active in the undissociated form, Kem BS exhibits the maximum performance in acid formulations with pH below 5.5.

Properties and stability

Kem BS is very soluble in water, glycerin and glycols, slightly soluble in alcohols. Stable to discoloration and low storage temperature, may tolerate working temperature up to 80°C. The activity depends on the pH of the formulation, with the maximum activity in the acid pH range up to 5.5.

Applications

Kem BS can be used to protect a variety of cosmetics against microbial growth, in particular aqueous systems and emulsions. The final pH must be adjusted to 5.5 max. It is permitted for the preservation of natural cosmetics according to all certification bodies. Typical cosmetic applications include:

- *Hair care:* gels, shampoos, lotions, conditioners, mousses.
- *Body and face care:* serums, tonics, gels, lotions, creams, wipes.
- *Make-up:* foundations, wipes, powders.
- *Shaving products:* shave soaps, gels, aftershave balms, lotions, creams.
- *Sun products:* sunscreens, suntans, aftersuns.
- *Bath products:* shower gels, bubble baths, handcleaners, intimate, oils, powders, wipes.
- *Baby care:* shampoos, bath products, lotions, creams, oils, powders, wipes.
- *Raw materials:* surfactants, vegetal extracts.

Use levels

Kem BS may be used at concentrations of 0.2-1.0% with no additional preservatives.

Regulatory approval

Sodium benzoate and potassium sorbate have been extensively tested and widely used in cosmetics, pharmaceuticals and foods; they are the most used food preservatives. Their large regulatory acceptance allows formulators to create cosmetics for worldwide distribution and natural market. Kem BS is approved in *EU, USA, Brazil, Japan* and ASEAN countries in all categories of cosmetics for both rinse-off and leave-on.

Technical support

Our microbiological laboratory offers microbial challenge tests to ensure the optimal preservation of customer formulations.

For further information, documentation and samples please contact us.