



Kem NK

INCI composition: *Phenoxyethanol*
Water
Sodium Benzoate
Potassium Sorbate

Appearance: Clear, yellowish liquid

Description

Kem NK is a broad spectrum preservative blend based on Phenoxyethanol, Sodium benzoate and Potassium sorbate. It is an optimised combination particularly suggested to individuals with sensitive skin and for more delicate cosmetic applications, such as leave-on cosmetics for face (lotions, creams, foundations, masks).

Kem NK represents a mild alternative in cosmetic preservation, may replace paraben-based blends and other questioned preservatives, offering high antimicrobial efficacy and lower in-use cost.

Kem NK meets the most stringent demands of today's personal care market, allowing the creation of safe formulations for the worldwide distribution.

Antimicrobial activity

Kem NK combines the antibacterial activity of Phenoxyethanol with the antibacterial/antifungal activity of Sodium benzoate and the antifungal activity of Potassium sorbate. It is a well balanced combination highly effective against Gram-negative bacteria, Gram-positive bacteria, yeasts and molds.

As it is based on salts of organic acids, which are effective in the undissociated form, the final formulation pH needs to be acidic not higher than 5.5.

Properties and stability

Kem NK is soluble in water, alcohols and glycols. Stable to discoloration and low storage temperature, may tolerate working temperature upto 80°C.

The antimicrobial effect depends on pH with maximum performance at pH not higher than 5.5.

Applications

Kem NK is a very mild and gentle to skin preserving system for the protection of a variety of cosmetics in form of aqueous systems or emulsions for rinse-off and especially leave-on applications. Typical cosmetic and dermo-pharmaceutical applications include:

- *Hair care:* gels, shampoos, lotions, conditioners, mousses.
- *Body & face care:* serums, tonics, gels, lotions, creams, masks, 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.
- *Topical pharmaceutical products:* lotions, creams.

Use levels

Kem NK may be used in the range of 0.5-1.2%, at this levels no additional preservatives are required.

Regulatory approval

The components of Kem NK were extensively tested and recognized as safe; the product enjoys a global regulatory acceptance, allowing the formulation of global cosmetics.

Kem NK is approved in *EU*, *USA* and *Japan* in all categories of cosmetics without restrictions.

Technical support

Our microbiological laboratory provides technical support and efficacy testing; the most adequate preservation is suggested on the basis of challenge tests conducted on customer formulations.

For further information, documentation and samples please contact us.

The information given in this publication is based on our best knowledge and experience. We don't assume any liability in connection with its use. It is responsibility of the user to comply with all applicable laws and regulations, and observe all third party rights.