



Kem PBD

INCI composition: *Phenoxyethanol*
Benzoic acid
Dehydroacetic acid

Appearance: Clear, yellowish liquid

Description

Kem PBD is a liquid system based on globally accepted cosmetic preservatives. This is a balanced and gentle to skin combination with broad spectrum antimicrobial activity, suitable for the protection of rinse-off & leave-on cosmetics with slight acid pH up to 6.

Kem PBD represents an effective mild alternative in cosmetic preservation, which may replace paraben blends and other questioned preservatives. This system meets the stringent demands of today's personal care products for safety and efficacy, allowing the creation of formulations for global distribution.

Antimicrobial activity

Kem PBD combines the antibacterial action of phenoxyethanol, the antibacterial/antifungal action of benzoic acid with the antifungal action of dehydroacetic acid. The blend is an optimised combination effective against Gram-negative bacteria, Gram-positive bacteria, yeasts & moulds.

Due to presence of organic acids, the activity depends on the pH of the formulation, the lower the pH the higher the antimicrobial activity with maximum effect in the acid pH range up to 6.

Properties and stability

Kem PBD is slightly soluble in water and polar oils, soluble in alcohols and glycols. Stable to discoloration, may tolerate working temperature up to 80°C.

Kem PBD exhibits the maximum performance in acid formulations with pH from 3 to 6.

Applications

Kem PBD is an effective and skin tolerable preserving system for the control of microbial growth in a wide variety of personal care products for rinse-off & leave-on, particularly aqueous systems and emulsions. Typical cosmetic applications include:

- *Hair care:* gels, shampoos, lotions, conditioners, mousses.
- *Body & 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 PBD may be used in the range of 0.5-1.0%, at these levels no further antimicrobials are normally required for product preservation.

Regulatory approval

The components of Kem PBD were extensively tested and recognized as safe cosmetic ingredients; the product enjoys a global regulatory acceptance, allowing the creation of global cosmetics.

Kem PBD is approved worldwide (*EU, USA, Latin America, Japan, China, ASEAN*) in both rinse-off and leave-on cosmetics. It is not allowed in products to be aerosolized in *EU, Latin America, ASEAN*.



Technical support

Our microbiological laboratory provide technical support and efficacy testing; the most adequate preservation is suggested on the basis of challenge tests conducted on customer's formulations. For further information, documentation and samples please contact us.

Highlights

- ✓ Highly effective broad spectrum preservation
- ✓ Gentle to the skin
- ✓ Globally accepted cosmetic ingredients
- ✓ Contains no controversial preservatives
- ✓ Almost odourless
- ✓ Cost-effective