



Kem BBD

INCI composition: *Benzyl alcohol*
Benzoic acid
Dehydroacetic acid

Appearance: Clear, yellowish liquid

Description

Kem BBD is a liquid system based on globally & COSMOS permitted 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 acid pH from 3 to 6.

Kem PBD represents an effective mild alternative in cosmetic preservation that may replace parabens, phenoxyethanol blends and other questioned preservatives. This system meets the stringent demands of today's personal care products for safety and efficacy, enabling formulations for the global distribution and natural cosmetics compliant to COSMOS, NaTrue and other certification standards.

Antimicrobial activity

Kem BBD combines the antibacterial effect of benzyl alcohol, the antibacterial/antifungal action of benzoic acid with the antifungal action of dehydroacetic acid. This blend is a balanced combination effective against Gram-negative bacteria, Gram-positive bacteria, yeasts & moulds.

Due to presence of organic acids benzoic acid & dehydroacetic acid, the antimicrobial activity is pH dependent, the lower the formula pH the higher the antimicrobial activity with maximum effect in the acid pH 3-6.

Properties and stability

Kem BBD is slightly soluble in water and polar oils, soluble in alcohols and glycols. It may tolerate working temperature up to 80°C, but prolonged exposition to high temperature should be avoided.

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

Applications

Kem BBD 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

The typical use levels of Kem BBD are in the range of 0.5-1.0%, which can be increased to 1.2% in more complex and difficult to preserve cosmetics. At these levels no further preservatives or antimicrobials are normally required for complete product preservation.



Regulatory approval

The components of Kem BBD were extensively tested and recognized as safe cosmetic ingredients; the product enjoys a global regulatory acceptance, allowing the creation of global cosmetics. Kem BBD 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*. It can be used in natural & organic cosmetics certified by the major standards (COSMOS, NaTrue, Ecocert, BDIH, Soil Association, ICEA).

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
- ✓ Permitted in COSMOS natural cosmetics
- ✓ Gentle to the skin
- ✓ Globally accepted
- ✓ Without phenoxyethanol and controversial preservatives
- ✓ Mild sweet odour
- ✓ Cost-effective