



## Kem BSB

**INCI composition:** *Benzyl alcohol*  
*Glycerin*  
*Benzoic acid*  
*Sorbic acid*

**Appearance:** Clear, yellowish liquid

### Description

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Kem BSB is a liquid preservative system based on globally accepted & COSMOS permitted cosmetic ingredients. This is well-balanced, effective & gentle to skin combination with broad spectrum antimicrobial activity, suitable for the protection of cosmetics with acid pH from 3 to 6.

Kem BSB 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

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

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

### Properties and stability

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

### Applications

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Kem BSB 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

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The typical use levels of Kem BSB 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**

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

Kem BSB is approved worldwide (*EU, USA, Latin America, Japan, China, ASEAN*) in both rinse-off and leave-on cosmetics. It can be used in natural & organic cosmetics certified by the major standards (COSMOS, NaTrue, Ecocert, BDIH, Soil Association, ICEA).

### **Technical support**

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Our microbiological laboratory provide technical support and preservative 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**

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- ✓ Highly effective broad spectrum preservation
- ✓ Permitted in COSMOS natural cosmetics
- ✓ Gentle to the skin
- ✓ Globally accepted
- ✓ Without controversial preservatives
- ✓ Mild sweet odour
- ✓ Cost-effective