



## Kem E

**INCI composition:** *Benzyl Alcohol*  
*Water*  
*Potassium Sorbate*  
*Sodium Benzoate*

**Appearance:** Clear pale yellow liquid

### Description

---

Kem E is a broad spectrum preservative blend based on nature-identical substances. This system represents a gentle on the skin and effective alternative in cosmetic preservation, designed to replace other preservatives which are currently questioned.

With global approval for every personal care application, Kem E can be used for the protection of a wide range of cosmetics with acidic pH. Kem E is permitted in natural & organic cosmetics in accordance with the major certification standards (COSMOS, Ecocert, Soil Association, BDIH, ICEA, NaTrue).

### Antimicrobial activity

---

Kem E is an optimised combination of the antibacterial properties of Benzyl alcohol with the antifungals Potassium sorbate and Sodium benzoate. It is very effective against Gram-negative bacteria and Gram-positive bacteria as well as against yeasts and moulds.

Due to the presence of salts of organic acids, the antimicrobial activity increases when the pH is lowered, with the best effect at acid pH below 5.5.

### Properties and stability

---

Kem E is very soluble in glycerin and glycols, soluble in water, slightly soluble in alcohols. Stable to discoloration and low storage temperature, may tolerate working temperature up to 80°C.

It should be used in the acid pH range from 3 to 5.5.

### Applications

---

Kem E can be used to protect a variety of cosmetic products against microbial growth, particularly aqueous systems and emulsions. It is also allowed for use as synthetic preservative in natural cosmetics according to main certification bodies. Typical personal care 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 E may be used at concentrations of 0.5-1.0% with no additional preservatives.



### **Regulatory approval**

---

The components of Kem E were extensively tested and used in cosmetics, pharmaceuticals & foods. The global regulatory acceptance allows formulators to create cosmetics for worldwide distribution and for natural market. Kem E is approved in *EU, USA, Brazil, Latin America, China, Japan & ASEAN countries* in all categories of cosmetics for both rinse-off & leave-on.

### **Technical support**

---

Our microbiological laboratory may support product preservation with a challenge testing service; the optimal preservation is suggested on the basis of tests conducted on customer's formulations. For further information, documentation and samples please contact us.

### **Highlights**

---

- ✓ Gentle to the skin & strong broad spectrum preservation.
- ✓ Globally accepted cosmetic preservatives.
- ✓ Contains no controversial preservatives.
- ✓ Water soluble.
- ✓ Natural certified cosmetics.
- ✓ Cost-effective.