



## Kem Plus 2

**INCI name:** *Phenoxyethanol,  
Iodopropynyl Butylcarbamate*

**Appearance:** Clear colourless to pale yellow liquid

### Description

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Kem Plus 2 is a powerful liquid preservative with broad spectrum antimicrobial activity alternative to parabens. It is effective in broad pH range, soluble in water at the use levels and does not change odour & viscosity of formulations. Suitable for the reliable protection of wide range of personal care products, it is particularly suggested in rinse-off cosmetics.

### Antimicrobial activity

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Kem Plus 2 is a preservative system highly effective against Gram-negative bacteria, Gram-positive bacteria, yeasts & moulds. It is a well balanced combination of effective preservatives: phenoxyethanol works as bactericidal while iodopropynyl butylcarbamate is the most powerful antifungal agent used in cosmetics.

### Properties & stability

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Kem Plus 2 is very soluble in alcohols & glycols, soluble in water & polar oils.  
It is stable and active in the pH range 3-9. Should be protected from direct sunlight.

### Applications

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Kem Plus 2 is a preservation system that can be incorporated in wide range of cosmetic products from aqueous formulations (solutions, tonics, gels, surfactant-based) to oil-based formulations (emulsions, oils, lipogels) & wet wipes. Typical applications include:

- *Hair care:* shampoos, lotions, conditioners, gels, mousses.
- *Body & face care:* tonics, gels, lotions, creams, oils, wipes.
- *Make-up:* foundations, wipes.
- *Bath products:* shower gels, bubble baths, handcleaners, intimate, wipes.
- *Raw materials:* surfactants.

### Use levels

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The suggested use levels of Kem Plus 2 are 0.4-0.9%, in this range no further antimicrobials are usually required for the adequate product preservation.

### Regulatory approval

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*USA, ASEAN:* allowed in rinse-off and leave-on products not to be aerosolized.

*EU:* allowed in bath products, shower gels and shampoos without restrictions. Allowed in leave-on products not for use on large part of body and not for children under 3 years (label required). Not to be used for oral-care and lip-care.

*Japan:* allowed in rinse-off and leave-on products not to be aerosolized.



### **Technical support**

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Challenge test can be offered to customers; the optimal preservation is suggested on the basis of tests conducted on customer formulations.

For further information, documentation and samples please contact us.

### **Highlights**

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- ✓ Powerful broad spectrum preservation.
- ✓ Effective alternative to parabens.
- ✓ Not sensitive to pH and effective in wide pH range 3-9.
- ✓ Water soluble at the use levels.
- ✓ No changes of odour & viscosity of finished cosmetics.
- ✓ Suitable for wide range of cosmetics, particularly suggested in rinse-off.
- ✓ Reduced use levels & competitive final costs.