

Akema Fine Chemicals S.r.I. Via Puglie, 12 > 47853 Coriano (RN) Italy Tel. +39 0541 657077 > Fax +39 0541 657134 info@akema.it > www.akema.it



Kem Plus 2

INCI name: Phenoxyethanol, Iodopropynyl Butylcarbamate

Appearance: Clear colourless to pale yellow liquid

Description

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

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

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

Kem Plus 2 is a preservation system tha 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

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

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.



Akema Fine Chemicals S.r.l. Via Puglie, $12 \rightarrow 47853$ Coriano (RN) Italy Tel. +39 0541 657077 \rightarrow Fax +39 0541 657134 info@akema.it \rightarrow www.akema.it



Technical support

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

- ✓ Powerful broad spectrum preservation.
- ✓ Effective alternative to parabens.
- \checkmark Not sensitive to pH and effective in wide pH range 3-9.
- ✓ Water soluble at the use levels.
- \checkmark 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.

The information given in this publication is based on our best knowledge and experience. We do not assume any liability in connection with its use. It is responsibility of the user to comply with all applicable laws and regulations, and observe all third party rights.