

## **Kemaben**

**INCI name:** *Imidazolidinyl urea,  
Methylparaben,  
Propylparaben,  
Propylene Glycol*

**Appearance:** Clear colourless liquid

### **Overview**

Kemaben is a synergistic combination of the antibacterial compound Imidazolidinyl Urea with the antifungals Methylparaben and Propylparaben. This liquid system provides a broad spectrum antimicrobial protection to many types of personal care products. The synergistic activity of Kemaben allows lower levels of single preservatives, improving the safety profile of the product.

The components of Kemaben have been for decades the most widely used cosmetic preservatives, all were extensively tested and approved, both by toxicological and environmental point of view.

### **Antimicrobial activity**

Kemaben is a preservative system highly effective against Gram-negative bacteria, Gram-positive bacteria, yeasts and molds.

### **Properties and stability**

Kemaben is soluble in water and polar solvents, not soluble in oils and apolar solvents.

It is stable and active in the pH range 3.5-8. Prolonged working temperature over 50°C should be avoided.

Compatible with anionic, cationic and non ionic cosmetic ingredients.

### **Applications**

Kemaben can be easily incorporated in a wide range of cosmetic products; it is an ideal system for the preservation of aqueous formulations and emulsions. Typical applications include:

- *Hair care:* shampoos, conditioners, gels, mousses.
- *Body and face care:* toners, gels, lotions, creams, wipes.
- *Make-up:* foundations, eyeliners, mascaras, powders, wipes.
- *Sun products:* sunscreens, suntans, aftersuns.
- *Bath products:* shower gels, bubble baths, handcleaners, intimate, wipes.
- *Baby care:* shampoos, bath products, gels, lotions, creams, powders, wipes.
- *Raw materials:* surfactants, vegetal extracts.

### **Use levels**

Kemaben is typically used at 0.6-1.2%. No auxiliary preservatives are required for adequate product preservation, also in more complex formulations.

### **Regulatory approval**

*USA and EU:* allowed upto 2.0% without application restrictions.

*Japan:* allowed upto 1.0% in rinse-off products with warning label.

### **Technical support**

Akema laboratory supports customers in the preservation of any product at development stage and contributes to improve the protection of existing formulations. The optimal level of preservatives to be used is suggested on the basis of specific preservative efficacy testing (Challenge test).

For further information, documentation and sample please contact us.