

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



Kemidant 2000

INCI name: DMDM Hydantoin,

Water

O OH

Appearance: Clear colourless liquid

Overview

Kemidant 2000 is a special DMDM Hydantoin blend in water solution with very low free-formaldehyde content (0.09% max.) and high stability to freezing temperatures. In comparison to standard DMDM hydantoin, this product has better safety classification & regulatory profile, while bring the same efficacy and technical benefits. It has broad pH range, high water solubility, stability and compatibility with other ingredients. Kemidant 2000 represents an improved DMDM Hydantoin solution, safer and more stable to storage that provides the same formulating advantages of the classic DMDM hydantoin and well matches the requirements of current EU regulation and cosmetics.

Antimicrobial activity

Kemidant 2000 is highly effective against Gram-negative bacteria & Gram-positive bacteria; it is also active against moulds.

Properties & stability

Kemidant 2000 is very soluble in water and polar solvents, not soluble in oils and apolar solvents. It is stable and active in the pH range 3-9 and has no effects on colour, odour & viscosity of cosmetics. May tolerate short process temperature to 80°C as well as prolonged exposition to storage temperature below 0°C with no crystallization problems. It is compatible with anionic, cationic and non-ionic cosmetic ingredients.

Applications

Kemidant 2000 is an easy to use liquid preservative that can be readily incorporated in a wide range of cosmetic formulations. For its complete miscibility in water it is particularly suggested in aqueous formulations, surfactants blends and emulsions. Typical applications include:

- Hair care: shampoos, conditioners, gels, mousses.
- Body & 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 & other blends.

Use levels

Kemidant L can be used used at 0.2-0.6% alone or in combination with antifungals in more complex formulations. It is synergistic with parabens, IPBC, other preservatives & preservative boosters.



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



Regulatory approval

In *EU, USA, Latin America, China* & *ASEAN* it is allowed up to 0.85% without restrictions. In *Japan* it is allowed up to 0.42% in rinse-off products with warning label.

Technical support

Our laboratory offers challenge test service to allow the optimum preservation in customer formulations. For further information, documentation and samples please contact us.

Highlights

- ✓ Highest preservation efficacy against bacteria.
- ✓ Improved blend with minimum free-formaldehyde content (0.09% max.).
- ✓ Better safety classification.
- ✓ Stable to freezing temperature.
- ✓ Largely used in wide range of cosmetics
- ✓ Not pH sensitive and effective in pH range 3-9.
- ✓ Highly soluble in water.
- ✓ Does not change odour, colour & viscosity of finished cosmetics.
- ✓ Cost-effective.

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.