



Kem Diol 35

INCI name: *Phenoxyethanol,
Caprylyl glycol*

Appearance: Clear colourless and almost odourless liquid

Description

Kem Diol 35 is a liquid preservative based on the globally accepted preservative phenoxyethanol enhanced by the multifunctional ingredient caprylyl glycol that has emollient & preserving boosting effect. This combination provides broad spectrum protection to a variety of cosmetics without pH restrictions and with no impact on the odour and colour of formulations. It represents a gentle & effective alternative in cosmetic preservation, allowing formulations with a reduced content of traditional preservatives.

Kem Diol 35 is an efficient and versatile alternative in cosmetic preservation that contains no controversial ingredients and meets the most stringent demands of modern personal care market for safety, efficacy and global approval.

Antimicrobial activity

Kem Diol 35 is a broad spectrum preservative active against bacteria, yeasts & moulds. In this system the caprylyl glycol boosts the antimicrobial performance of phenoxyethanol and helps to decrease the amount of preservative needed. caprylyl glycol is a C8 linear diol that acts as preservative booster, it disrupts microbial membrane and promotes the entry of phenoxyethanol into the microbial cell.

Properties & stability

Kem Diol 35 is very soluble in alcohol, glycerin and glycols; soluble in water to approx. 1.5% and sparingly soluble in oils.

Colourless and practically odourless, it is effective in wide pH range from 3 to 9 and generally well compatible with other cosmetic raw materials. May tolerate working temperature up to 80°C.

Applications

Kem Diol 35 can be used for the preservation of a wide variety of aqueous cosmetics, emulsions and anhydrous systems. Improves the skin feel of personal care products with limited reduction of final viscosity. Typical applications include:

- *Hair care:* gels, shampoos, lotions, conditioners, mousses, colourants.
- *Face & body care:* serums, tonics, gels, lotions, creams, cleansers, oils, sticks, wipes.
- *Make-up:* foundations, eyeshadows, eyeliners, mascaras, sticks, powders, wipes.
- *Shaving products:* shaving creams, aftershave, lotions, creams.
- *Body, foot & hand care:* gels, lotions, creams, exfoliants, oils, wipes.
- *Sun care:* sunscreens, suntans, aftersuns, gels, milks, creams, oils, sprays, roll-ons.
- *Bath products:* shower gels, bubble baths, hand-cleaners, intimates, oils, powders, wipes.
- *Baby care:* shampoos, bath products, lotions, creams, pastes, oils, powders, wipes.
- *Raw materials:* surfactants, aqueous active ingredients, oils.

Use levels

Kem Diol 35 can be typically used at 0.5-1.5% with no additional preservatives. In the most complex formulations it might need to be combined with antifungal agents.



Regulatory approval

The components of *Kem Diol 35* are widely used cosmetic ingredients with well-documented safety & toxicological profiles that are worldwide approved in personal care. This preservative is permitted in *EU, USA, Brazil, Latin America, Japan, China & ASEAN countries* up to 1.5% in all personal care categories without restrictions.

Technical support

Our microbiological laboratory supports the selection of the most adequate preservation. Challenge testing can be offered to determine the optimal level of preservative in customer's formulations. For further information, documentation and samples please contact us.

Highlights

- ✓ Broad spectrum & efficient cosmetic preservation.
- ✓ Based on largely used and non-questioned ingredients.
- ✓ Reduced content of traditional preservatives.
- ✓ Colourless & odourless liquid.
- ✓ Highly stable to temperature & discoloration.
- ✓ Effective in wide range of pH from 3 to 9 and over.
- ✓ Soluble in water at the use levels.
- ✓ Versatile system for many cosmetic applications.
- ✓ For clear aqueous cosmetics, solutions & gels.
- ✓ Globally approved with no restrictions.