



Stabil Duo

INCI name: Caprylyl glycol
Ethylhexylglycerin

Appearance: Clear colourless & odourless liquid

Description

Modern alternative for gentle & efficient preservation of personal care products without traditional preservatives. *Stabil Duo* is a combination of the most widely used multifunctional ingredients, which in addition to broad spectrum antimicrobial efficacy provides multiple cosmetic benefits as emollient, skin-feel enhancer and co-emulsifier.

Stabil Duo represents a reliable alternative to classic preservatives, allowing formulators to create self-preserving cosmetics for most delicate applications in broad pH range, without modifying odour and colour.

Antimicrobial activity

Optimised combination of caprylyl glycol and ethylhexylglycerin with broad spectrum antimicrobial action on bacteria, yeasts & moulds. *Stabil Duo* acts synergistically with the other ingredients of formulations like chelating & antioxidant agents and other conditions that inhibits microbial growth. It also acts as preservative booster and may reduce the use level of traditional preservatives.

Properties & stability

Stabil Duo is very soluble in alcohol, propylene glycol, glycerine; it is soluble in polar oils, slightly soluble in water (approx. 0.1%). It is colourless & odourless liquid highly stable to pH, temperature and light. Can be used in the pH range 3-9 and tolerate process temperature over 80°C.

Applications

Stabil Duo can be used in a variety of cosmetic applications for rinse-off, leave-on & wet wipes, especially in sensitive applications such as baby-care, eye-care & in mucous membrane products. It is ideal to design self-preserving cosmetics without traditional preservatives or in combination with reduced content of traditional preservatives. Particularly suitable for emulsions, oil-based & surfactant-based formulations, it can be used in aqueous cosmetics up to its solubility limit or with solubilising agents. Typical personal care applications include:

- *Hair care:* shampoos, lotions, conditioners, mousses, colourants.
- *Face & eye care:* serums, tonics, gels, lotions, creams, cleansers, masks, oils, sticks.
- *Make-up:* foundations, mascaras, eyeshadows, eyeliners, lipsticks, lip glosses, powders.
- *Shaving products:* shaving creams, aftershave, lotions, creams.
- *Body, foot & hand care:* gels, lotions, creams, exfoliants, oils.
- *Sun care:* sunscreens, suntans, aftersuns, gels, milks, creams, oils, sprays, roll ons.
- *Bath products:* shower gels, bubble baths, hand-cleaners, intimate, oils, powders.
- *Baby care:* shampoos, bath products, lotions, creams, oils, powders, wipes.
- *Wet wipes:* baby wipes, hand wipes, face wipes, body wipes, feminine wipes, sun protection wipes.
- *Deodorant & antiperspirants:* solutions, creams, pump sprays, sticks.



Use levels

Stabil Duo can be used at concentrations of 0.5-1.5%. When used at 0.5-1.0% exerts a preservative boosting effect that may effectively reduce the level of traditional preservatives or increase the performance of other antimicrobial agents.

It can be used in combination with reduced content of other preservatives like Kem EHG, Kem EHB, Kem CP. For example 0.3-0.6% *Stabil Duo* in combination with half typical content of other preservatives shows synergic effect that allows formulators to minimise the content of traditional preservatives and at the same time provides equal to superior antimicrobial efficacy.

Regulatory approval

The components of *Stabil Duo* enjoy excellent safety profiles, long history of use and global approval in leave-on cosmetics. *Stabil Duo* meets the regulatory requirements of cosmetics worldwide (*EU, USA, Latin America, Korea, China, ASEAN*) and contains no listed preservatives. In *Japan* it is not permitted in cosmetics that come into contact with mucous membranes (eyeliners, oral & bath preparations).

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 & samples please contact us.

Highlights

- ✓ Formulation of modern cosmetics without traditional preservatives
- ✓ Broad spectrum & multifunctional efficient preservation
- ✓ Booster for traditional preservatives
- ✓ Free from listed preservatives, fragrances & questioned ingredients
- ✓ Based on skin-friendly & worldwide accepted ingredients
- ✓ Neutral properties: colourless & odourless liquid not sensitive to pH
- ✓ Highly stable to temperature & light
- ✓ Reduce the use levels of preservatives & other antimicrobials