



A2 Plus Liquid

INCI composition: *Propylene Glycol*
Diazolidinyl Urea
Iodopropynyl Butylcarbamate

Appearance: Clear, colourless viscous liquid

Description

A2 Plus Liquid is a powerful broad spectrum system based on traditional cosmetic preservatives without parabens. It is an easy to work liquid preservative that ensures complete protection of most difficult cosmetics. This is a versatile system effective over a broad range of pH and with no effects on colour, odour & viscosity of cosmetics.

Antimicrobial activity

A2 Plus Liquid is a synergistic combination of Diazolidinyl urea & Iodopropynyl Butylcarbamate in ratio 100:1, dissolved in propylene glycol. This ratio gives the maximum antimicrobial activity with the lowest level of preservatives. It is highly effective against Gram-negative & Gram-positive bacteria, yeasts & moulds.

Properties & stability

A2 Plus Liquid is very soluble in propylene glycol, soluble in water, sparingly soluble in glycerine, very slightly soluble in ethanol and insoluble in mineral oil.

Prolonged heating over 40°C and the exposition to direct sunlight should be avoided. It is stable and fully effective in the pH range 3-9.

Applications

A2 Plus Liquid is an easy to handle preservative with strong efficacy that can be used alone in a variety of cosmetic products. It is compatible with the most commonly used cosmetic ingredients and does not change the appearance of cosmetics. Typical personal care applications include:

- *Hair care:* shampoos, lotions, conditioners, gels, mousses.
- *Body & face care:* tonics, gels, lotions, wipes.
- *Make-up:* foundations, eye shadows, eyeliners, mascaras, powders, wipes.
- *Shaving products:* shave soaps, gels, aftershave balms, lotions, creams.
- *Bath products:* shower gels, bubble baths, hand cleaners, intimate, oils, powders, wipes.
- *Baby care:* shampoos, bath products, shower gels.
- *Raw materials:* surfactants.

Use levels

The typical use levels are 0.1-0.8%. No further preservatives are needed also in more difficult to preserve cosmetics.

Regulatory approval

EU, ASEAN: allowed in bath products, shower gels & shampoos without restrictions. Allowed in leave-on cosmetics 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.

USA: allowed in rinse-off & leave-on products not to be aerosolized.

Japan: Not allowed.



Technical support

Our microbiological laboratory can support customers in the preservative choice; the optimal preservation is suggested on the basis of challenge tests conducted on customer's formulations. For further information, documentation and samples please contact us.

Highlights

- ✓ Powerful broad spectrum preservation.
- ✓ Synergistic combination of the strongest cosmetic preservatives.
- ✓ Effective alternative to parabens.
- ✓ Easy to formulate liquid form.
- ✓ Not sensitive to pH and effective in wide pH range 3-9.
- ✓ No changes of colour, odour & viscosity of finished cosmetics.
- ✓ Suitable for wide range of cosmetics, particularly suggested in rinse-off.
- ✓ Reduced use levels & competitive final costs.