

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



Preservative A2

INCI name: Diazolidinyl Urea

CAS n°: 78491-02-8

OH O N N OH

Appearance: Fine white powder

Overview

Preservative A2 is a powerful cosmetic preservative with the highest efficacy against bacteria. It is easy to work and causes no changes of the appearance of cosmetics, all at reduced use levels and low costs. It enjoys long history of use in many cosmetic applications.

Antimicrobial activity

Preservative A2 is highly effective against Gram-negative & Gram-positive bacteria, it is also effective against moulds with a limited effect against yeasts. It shows the double activity of Imidazolidinyl urea.

Properties & stability

Preservative A2 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. Prolonged heating over 50°C should be avoided. Compatible with anionic, non ionic and cationic systems and with other cosmetic ingredients, it does not modify the colour, odour & viscosity of finished cosmetics.

Applications

Preservative A2 can be easily incorporated in a wide range of cosmetic formulations. For its high water solubility it is particularly suggested in aqueous formulations & emulsions. Typical applications include:

- Hair care: shampoos, conditioners, gels, mousse.
- 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 bath, handcleaners, wipes.
- Raw materials: surfactants.

Use levels

Preservative A2 is typically used at 0.1-0.3% in combination with low concentrations of antifungal agents. It is synergistic with parabens, IPBC and other preservatives.

Regulatory approval

Widely used cosmetic preservatives for decades, tested and approved by FDA & EU scientific committees. It is approved for cosmetics in *EU, USA, Latin America, China & ASEAN* up to 0.5% without restrictions. It is not permitted in *Japan*.



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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 specific cosmetics. For further information, documentation and sample please contact us.

Highlights

- ✓ Highest preservation activity against bacteria.
- ✓ Long history of safe cosmetic use.
- ✓ Largely used in wide range of cosmetics.
- ✓ Easy to use
- ✓ Not pH sensitive and effective in pH range 3-9.
- ✓ Highly soluble in water.
- ✓ Does not change odour, colour & viscosity of finished cosmetics.
- ✓ Low use levels & reduced final costs.

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