

AMINAT[®]-CB

PRESERVATIVE FOR COSMETICS

INCI Name: Benzyl Alcohol (and) Glycerin (and) Ethyl Lauroyl Arginate HCl (and) Cinnamic Acid

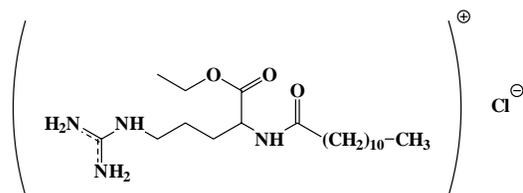
PRODUCT DESCRIPTION

AMINAT-CB is a multifunctional product that can be used by Personal Care formulators as a preservative, especially in skin care products such as creams, lotions and body milks. It might also act as preservative in hair care products hair treatments and shampoos. Additionally, it can provide smoothness to skin and hair because of the cationic nature of its main active.

AMINAT-CB is based on a solution of Ethyl Lauroyl Arginate HCl, hereinafter LAE[®], in benzyl alcohol and glycerine, incorporating cinnamic acid.

LAE[®] is a unique antimicrobial active ingredient with cationic surfactant properties derived from natural occurring substances, L-arginine and lauric acid.

Chemical structure:



CAS number: 60372 - 77 - 2

AMINAT-CB combines the outstanding activity of LAE[®] with the weaker activity of

two other components: benzyl alcohol and cinnamic acid, a cosmetic ingredient which acts synergistically with LAE[®] against moulds. Those two ingredients reinforce the antimicrobial efficacy of LAE[®], especially in formulations where many anionic ingredients are present.

Appearance	Transparent pale yellow liquid
pH at 20 °C (68°F) 1% solution	3.3 ± 1.0
Viscosity at 20°C (68°F) (Brookfield RV, sp 1, 50 rpm)	< 150 cPs
Density at 20°C (68°F)	1.08 ± 0.02 g/cm ³
Solubility	Dispersable in water, totally soluble in ethanol, glycerine and oil
pH stability	Stable between 3.0-7.0
Heavy metals	As: 3 ppm max. Cd: 1 ppm max. Pb: 1 ppm max. Hg: 1 ppm max.

Technical data provide further information about the product and are not subject to constant monitoring. Therefore, they are not binding.

APPLICATIONS

Preservative in hair and skin care products

AMINAT-CB is easy to incorporate into personal care formulations as it is a liquid, which is dispersible in water or in fats and oils. This ingredient can be added into emulsions at any stage of the manufacturing process, added into the water phase, the oily phase, during the emulsification process or after cooling down.

AMINAT-CB is a suitable preservative blend for all types of Personal Care products, including formulations with high content of anionic surfactants, such as shampoos, or anionic thickeners (Carboxymethylcellulose, Xanthan Gum, Bentonite or Carbomer) and which are particularly prone to fungal contamination.

Several preservation challenge test studies have shown that **AMINAT-CB** is a very effective preservative in concentrations of 0.5-1.5% in all kinds of formulations, independently of the existence of anionic raw materials.

Type of formulation	Recommended dosage
Sunscreens	0.5-1 %
Body milks	0.5-1%
Make-up removing milks and liquids	0.25-1%
Facial products	0.5-1%
Shampoos	0.5-1.5%
Hair conditioners	0.25-0.75%

Due to its cationic surfactant properties, LAE[®] provides additional smoothness to hair and skin and improves the skin natural

defense against pathogens, besides an excellent compatibility with all formulation ingredients.

REGISTRATION/APPROVAL

- LAE[®]: Regulation (EC) N° 1907/2006 (REACH). Registration number: 01-0000018076-71-0000
- Specific maximum doses allowed for each particular ingredient of the blends application product depending on countries are available upon request.

TOXICITY INFORMATION

AMINAT-CB has not been tested on animals. However, each of the ingredients has been tested extensively over the years. The ingredients of **AMINAT-CB** have been carefully chosen due to their global acceptance and excellent toxicity properties.

Ethyl Lauroyl Arginate HCl

LAE[®] combines a high antimicrobial efficacy with low toxicity, non-sensitizing and non skin irritating features. Additionally, the molecule is rapidly metabolised in the human body by chemical and metabolic pathways, breaking the molecule into natural compounds which are common in the human diet. This LAE[®] feature offers a remarkable degree of safety, being a key factor when the GRAS approval was granted by FDA in US. In many regions, the use of LAE[®] is permitted up to 0.4% in personal care formulations.

Benzyl Alcohol

Benzyl alcohol is permitted up to 1% level in many regions, due to it is excellent toxicity profile. Commonly used in flavors and fragrances, it is recognised as GRAS ingredient in the US, and it is used as a preservative in injectable and oral drugs. Benzyl alcohol is one of EU's 26 fragrance allergens.

PACKAGING

AMINAT-CB is available in 5 or 25 kg packages.

STORAGE AND SHELF LIFE

Keep containers tightly closed when not in use. Store in a dry cool place and avoid temperatures below 4°C (39°F) and above 30°C (86°F).

Under above mentioned conditions, shelf life of the product is of 18 months from production date.

Cinnamic Acid

Cinnamic acid is a cosmetic and food ingredient which is used in flavours and fragrances. It can be labelled as *Parfum*.

Safety Data Sheet can be supplied if required.

The information contained in this document cannot be taken as basis for guarantee or liability.

Technical data review: 04/03/2011