

AMINAT[®]-CG

PRESERVATIVE FOR NATURAL COSMETICS

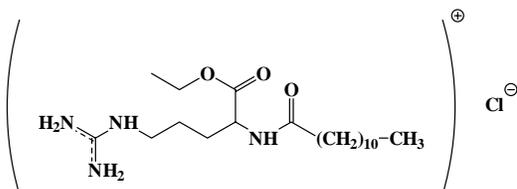
INCI Name: Glyceryl Caprylate (and) Glycerin (and) Ethyl Lauroyl Arginate HCl

PRODUCT DESCRIPTION

AMINAT-CG is a multifunctional product that can be used by Personal Care formulators as a preservative, especially in natural skin care products and hair care products, hair treatments and shampoos. Additionally, it may be used as main active in dermo-purifying and deodorant applications.

AMINAT-CG is based on a solution of Ethyl Lauroyl Arginate HCl, hereinafter LAE[®], in glyceryl caprylate and glycerine. 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-CG combines the outstanding activity of LAE[®] with the weaker activity of glyceryl caprylate, a cosmetic ingredient which acts synergistically with LAE[®] against microorganisms. This ingredient reinforces the antimicrobial efficacy of LAE[®], especially in formulations where many anionic ingredients are present. Therefore,

AMINAT-CG (100 % natural-based) is an excellent alternative to traditional preservatives.

Appearance	Transparent liquid
pH at 20 °C (68°F) 1% solution	4.3 ± 1.0
Viscosity at 20°C (68°F) (Brookfield RV, sp 2, 20 rpm)	2000 - 3000 cPs
Density at 20°C (68°F)	1.11 ± 0.02 g/cm ³
Solubility	Totally soluble in ethanol and water, dispersible in oil.
pH stability	Stable between 3.0-7.0

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-CG 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-CG is a suitable preservative blend for all types of Personal Care products, including formulations with high content of anionic surfactants, such as

shampoos, or with anionic thickeners (Carboxymethylcellulose, Xanthan Gum, Bentonite or Carbomer).

Several preservation challenge test studies have shown that **AMINAT-CG** is a very effective preservative at 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	0.5-1.5 %
Body milks	0.5-1.5%
Make-up removing milks and liquids	0.25-1.5%
Facial products	0.5-1.5%
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.

Active ingredient in dermo - purifying and deodorant applications

AMINAT-CG has shown an extraordinary activity against *Propionibacterium acnes*, that plays a fundamental role in causing acne. Therefore, this synergetic combination is an excellent active for dermo-purifying applications such as creams, lotions, gels, etc.

In the same way, **AMINAT-CG** may be employed in deodorant formulations showing an excellent activity against odour-causing microorganisms, such as *C. Xerosis* and *S. epidermidis*.

The recommended dosage as dermo-purifying and deodorant active is 0.5 – 2 %.

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-CG has not been tested on animals. However, each of the ingredients has been tested extensively over the years. The ingredients of **AMINAT-CG** 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.

Glyceryl Caprylate

Glyceryl Caprylate is a multifunctional wetting and refatting agent that may help to improve and maintain the moisture and balanced environment of the skin. It is 100 % from plant origin and not irritating.

PACKAGING

AMINAT-CG 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.

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: 11/01/2012