

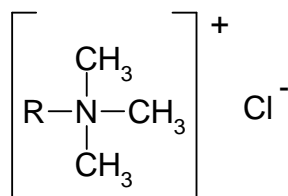
Genamin[®] BTLF

Cationic surfactant for the cosmetic industry

Chemical name

Alkyltrimethyl ammonium chloride

General formula



R = C_{20/22}

INCI designation

Behentrimonium Chloride

Product properties ^{*)}

Appearance (20 °C)

Pale yellowish pellets

Chemical and physical data

Active substance	67.0 –70.0 %
Dipropylenglycol	30 % approx.
Mean molecular weight	400 g•mol ⁻¹

Iodine colour number 5 max.
(50 % product / 40 % isopropanol / 10 % water)

pH-value (1% in water/ ethanol 1:1) 5.0 - 7.0

Free amine + amine hydrochloride 2.0 % max.

Product features

Genamin[®] BTLF is a new and exclusive form of Behentrimonium Chloride, free of any flammable solvents. Genamin[®] BTLF provides a safe, efficient and easy to use blend of this very successful and widely used conditioning quat. Outstanding performance on hair, such as soft, natural feel and excellent dry combing properties is now combined with safe and convenient handling. Genamin[®] BTLF is delivered as pellets with an active content of approx. 70 %. The product can be easily melted in the oil phase or dissolved in the hot water phase while preparing both traditional cream rinses as well as leave on conditioning sprays and mousses.

Genamin[®] BTLF can be used as 1:1 replacement for the widely used Genamin[®] KDMP.

- superior conditioning agent
- improves wet and especially dry combability
- gives volume and body to hair
- provides soft, natural feel
- good antistatic action
- convenient and safe handling
- vegetable based

^{*)} These characteristics are for guidance only and not to be taken as product specifications. The tolerances are given in the product specification sheet. For further product properties, specifications, safety and ecological data, please refer to the MSDS.

Uses

Genamin® BTLF is used mainly in cream-type hair conditioners and hair replenishing treatments. The concentration required depends on the hair. The more damaged the hair is, the more Genamin® BTLF will be used to achieve best effect, starting at approx. 0.5% up to 2.0%.

Other possible applications are in the manufacture of antistatic fixatives for permanent waving, hair lotions, shampoos and styling creams.

Application properties

As a cationic surfactant, Genamin® BTLF is adsorbed onto negatively charged surfaces without leaving a visible film. Therefore, Genamin® BTLF adsorbes onto the hair out of aqueous and alcoholic solutions as well as from emulsions (dispersions). This effect can be further enhanced by combination with other additives, such as film-forming agents and fatty components. Due to the resulting reduction in hair surface resistance, Genamin® BTLF facilitates combing and prevents the hair from 'flying'.

Hair damaged by bleaching, permanent waving or excessive degreasing feels and looks dull and lifeless. Genamin® BTLF greatly improves the condition of the hair, making the hair look healthy and strong.

Genamin® BTLF offers a superb softening effect also for thick and hard to manage hair. The antistatic effect of Genamin® BTLF is also noteworthy.

Compatibility

Genamin® BTLF can be used in combination with other cationic surfactants to allow special effects with regard to wet and dry combing properties and the feel of the treated hair. Especially the combination with Genamin®

CTAC (Cetrimonium Chloride) is recommended, yielding synergistic benefits in conditioning action.

Genamin® BTLF is compatible with nonionic surfactants. It reacts with anionic surfactants by forming electroneutral salts; most of these are only sparingly soluble in water but stable solutions may be obtained by using an excess of an anionic compound.

No signs of incompatibility were observed with mixtures consisting of Genamin® BTLF and commercial film-forming agents such as Diaformer® 'styling polymers, polyvinyl pyrrolidone, PVA and PVP/VA.

pH stability

As a quaternary ammonium salt Genamin® BTLF possesses excellent stability over a wide pH range. It differs from tertiary amines in that the cation persists also in alkaline medium.

Solubility

Genamin® BTLF is soluble in warm water. Upon cooling, Genamin® BTLF precipitates out of the aqueous solution.

Processing instructions

Genamin® BTLF can be incorporated to both, the aqueous or the oil phase:

Introducing Genamin® BTLF via the aqueous phase:

A hydrobic emulsifier, e.g. Hostacerin® DGI (INCI: Polyglyceryl- 2 Sesquiosostearate), the consistency modifier (fatty alcohol) and any oils used are melted at 75 – 80°C. Genamin® BTLF is dispersed in the aqueous phase while stirring and heating to approx. 75 °C. Then the heated water phase is added to the melted oil phase while stirring. Active substances and perfume oils should be added only after the mixture has cooled down to about 35°C.

Introducing Genamin® BTLF via the oil phase:

Genamin® BTLF is melted together at 75 – 80°C with a hydrophilic emulsifier, e.g. Hostaphat® KL 340 D (INCI: Trilaureth- 4 Phosphate), the consistency

modifier and any oils used. The aqueous phase is heated separately to the same temperature and added while stirring to the liquid quat/consistency modifier/oil phase. Active substances and perfume oils should be added only after the mixture has cooled down to about 35°C.

Storage instructions

The product must be protected from excessively high and low temperatures during storage.

Further information on handling, storage and dispatch is given in the EC safety data sheet.

This information is based on our present state of knowledge and is intended to provide general notes on our products and their uses. It should not therefore be construed as guaranteeing specific properties of the products described on their suitability for a particular application. Any existing industrial property rights must be observed. The quality of our products is guaranteed under our General Conditions of Sale.