



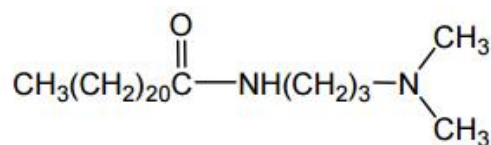
BD22

Product description

BD22 is an excellent hair conditioner and repair agent widely used, taking into account the characteristics of non-ionic surface activity and cationic surface activity, and has good compatibility with anionic surfactants. At the same time, it has a good color protection effect. In hair dye cream, it can enhance color intensity and color uniformity, reduce the damage caused by hair dyeing, and provide gel effect. As an effective auxiliary emulsifier in skin care creams and lotion.

INCI name:

BEHENAMIDOPROPYL DIMETHYLAMINE



Product characteristics and efficacy

physical characteristics	Date
appearance	Pale yellow granular solid
amine value (mg KOH/g)	130-140
pH value (1.0%Alcohol solution)	7.0-10.0
acid value(mg KOH/g)	4max.

*Molecular properties: taking into account both nonionic and cationic epigenetic properties, it shows nonionic epigenetic properties under neutral or alkaline conditions, and cationic epigenetic properties under acidic conditions: when behenamidopropyl dimethylamine is neutralized with acid, it shows better conditioning properties, and at the same time improves the softness of the hair;

* Hair restoration: used in shampoo in the form of non-ionic surface-activated, it shows good thickening, adsorption and conditioning, and is an excellent hair restoration agent;

* Antistatic: under acidic conditions, it can reduce hair static electricity, as an antistatic agent for hair products;

* Plant source, environmentally friendly: obtained by modifying behenic acid of plant source as raw material, it has good aquatic biodegradability and low toxicity;

* Good color protection effect: it shows good color protection in color protection shampoo, provides gel



effect in hair dye cream, and enhances color strength and color uniformity while reducing the damage caused by hair dyeing to hair;

* Compatibility: with amide structure, it shows good compatibility with anionic surfactants

* Conditioning: exists in the form of cationic surfactant in hair conditioner, compared with other commonly used conditioning agents, it shows superior conditioning, effectively improves the combability, softness and knotting phenomenon of hair, significantly improves the wet combability and dry combability of hair, and gives the hair a soft and fluffy texture.

Product Characteristics

Analysis of the amine values of commercially available behenamidopropyl dimethylamine shows that when the content of the active ingredient in behenamidopropyl dimethylamine exceeds 90%, its amine value ranges from 130-136, whereas the amine value of stearamidopropyl dimethylamine ranges from 150-160; based on the amine value ranges of the two, it is possible to determine the active ingredient content of the products of this type.

Description (at 25°C)	Pass	solid, having a slight characteristic odor
Color (Guarantee No.)	1	50Max
Melting point (°C)	64.2	85 ~ 75
Loss on drying (%)	0.1	1.0Max
Residue on ignition (%)	0.0	0.5Max
Amine Value	140	126 ~ 150
Heavy Metals (ppm)	20Max	20Max (Guarantee)
Arsenic (ppm)	2Max	2Max (Guarantee)

Range of amine values for a Japanese brand of behenylamidopropyl dimethylamine

When the amine value exceeds 140 mg KOH/g, i.e., the content of the active substance of C22 is lower than 90%, the percentage of C18 gradually increases, the neutralization ratio with acid decreases, and the tonicity gradually weakens.

Application

Amount of acid required to neutralize 1.0g BD22 (PH=3.5-4.5):

citric acid (100 %)	0.17
hydrochloric (40%)	0.22
lactic acid (88%)	0.28
glutamic acid (100%)	0.80



Formulation Application:

*Hair care products: conditioners, shampoos

*Hair coloring products: permanent hair coloring creams, color replenishing hair masks

*Skin care products: creams, lotions

Packaging and storage:

25kg/barrel storage; Store in a ventilated and cool place.