

- mild cleansing for hair & body • PEG-free • for fine hair • conditioning without build-up effect •

Presolution of Amidet®APA-22:

Phase	Ingredient	INCI	Supplier	%
A	Deionised Water	Aqua		86,50
	Citric Acid cryst.	Citric Acid		3,50
B	Amidet®APA-22	Behenamidopropyl Dimethylamine	Kao	10,00
				100,00

Formulation:

Phase	Ingredient	INCI	Supplier	%
C	Deionised Water	Aqua		22,55
C1	Esaflo EC 5	Guar Hydroxypropyltrimonium Chloride	Lamberti	0,25
	Citric Acid Solution 20%	Citric Acid		3,00
	Amidet®APA-22 (presolution)			3,00
D	Eucarol AGE EC	Disodium Coco-Glucoside Citrate	Lamberti	10,00
	Plantacare®1200	Lauryl Glucoside	BASF	8,00
	Chimin CG	Disodium Cocoyl Glutamate, Sodium Cocoyl Glutamate	Lamberti	7,00
	Betadet®SH-R	Cocamidopropyl Hydroxysultaine	Kao	14,00
	Saliguard®SP	Sodium Benzoate, Potassium Sorbate	Salicylates & Chemicals	0,80
	Comp. 80.2282 Wellness Tropical Fruit	Parfum	Lothar Streeck	0,40
	Deionised Water	Aqua		30,00
E	Citric Acid Solution 20%	Citric Acid		1,00
				100,00

Product Features:

Appearance: Light yellow, slightly translucent gel pH: 4,8-5,3
 Viscosity: Approx. 4000-8000 mPas (Brookfield DVII: spindle 6, speed 10)
 Stability: Stable for more than 3 months at 20° C and 40° C.

Manufacturing Procedure

Presolution of Amidet®APA-22:

1. Heat phase A to 85-95° C while stirring.
2. Add B little by little while stirring. Keep pH below pH 3,5. When Amidet®APA-22 is completely dissolved, start to cool down to room temperature while stirring.

Formulation:

3. Dissolve ingredients of phase C1 in C and stir until completely dissolved.
4. Adjust pH to pH 3,5-4,0.
5. Add ingredients of phase D in given order.
6. Adjust pH with part E to 4,8-5,3.

Please note: Amidet®APA-22 is soluble only at acidic pH between pH 3,5-4,0!

Biesterfeld Products:

Amidet®APA-22

Multifunctional conditioner for hair rinse formulations and 2-in-1 shampoos. This C22-Amidoamine is established as an eco-friendly alternative to CTAC and BTAC. It shows excellent hair conditioning effects with improved combing force reduction and antistatic effects for fly-away control. In shampoos and hair colorants Amidet APA-22 is also used as color protection agent.

Betadet®SH-R

Very mild amphoteric co-surfactant of vegetable origin that is especially recommended for baby and kids products. It shows good compatibilities with anionic, cationic and nonionic surfactants. In combination with anionics it acts as foam booster, improves the quality of foam and increases viscosity of shampoo, shower and liquid hand wash formulations.

Esaflo EC 5

Cationic guar gum derivative with notable conditioning effects for hair and skin care applications. Due to its interaction with keratin it provides excellent detangling properties and helps to reduce negative effects from soaps. The specific depolymerized structure does not generate viscosity and can be used for liquid surfactant formulations and wet wipes lotions. In addition it shows no build-up effect and is suitable for the use on fine hair.

Eucarol AGE EC

Anionic surfactant from vegetable and renewable source. Extremely mild to skin and eyes. Application as primary surfactant for baby care and natural cosmetic formulations. Also used as secondary surfactant to reduce the irritation level of shampoos, bath and shower formulations. Provides good foaming and effective cleaning for skin and hair. Suitable for natural cosmetics according to Ecocert, COSMOS and NaTrue.