

Technical Bulletin

Amylomer™ H-Care05

Derived natural biodegradable hair and skin conditioning agent

Description of the product

Derived natural biodegradable hair and skin conditioning agent. It is derived from vegetable polysaccharides from food grade quality starch and biodegradable. Improves combability and manageability of hair without loss of volume. Creates a natural, soft-conditioned hair with and good hold. It is a product which is very low quaternized.

INCI

Aqua; Starch Hydroxypropyl Oxidized Starch PG Trimonium Chloride; Sodium Lactate, Lactic Acid, Sodium Chloride; Sodium Benzoate

Chemical and physical properties

Appearance	Yellowish, light opaque
Dry content	38,7% ± 1%
Viscosity 20°C, Brookfield	350-550 mPas (Sp3,60U/min)
pH-value DIN 19268	~ 3,5 – 4,1
Cationic D.S.	~ 0,05

Intended use

Conditioning, antistatic, emulsion stabilising, viscosity controlling, foaming agent for hair and skin für ecofriendly hair and body shampoos.

Advantages

- Substantive to hair and skin
- Improves combability and feel of wet and dry hair
- Reduction of hair porosity
- Soft and silky feel even at the end of very dry hair
- Easy to use due to its liquid form
- Readily biodegradability
- Low aquatox

Properties

Amylomer™ H-Care05 is a liquid potato starch based conditioner with readily biodegradability and low aqua toxicity. It improves conditioning properties like wet and dry comb and wet and dry feel, without weighing down the dry hair. It improves the foaming quality. It is an environment-friendly alternative for conditioning and shampoos.

Combing force reduction

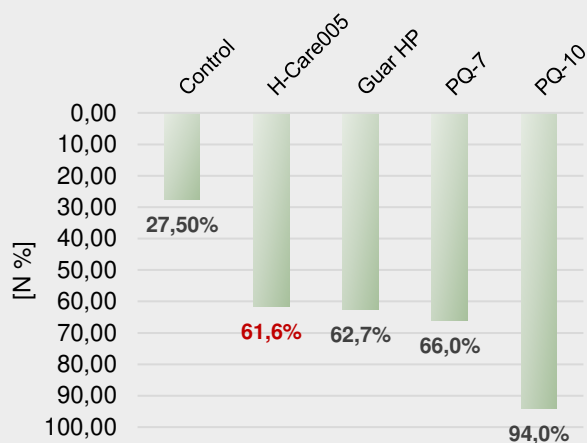


Abb. 1: Combing force results in wet hair
European bleached hair, basis test formulation: 9% SLES/ 3% CAPB/ Preservative/ 0,4% active cationic polymer

Application

Amylomer™ H-Care005 is used as a conditioning agent for hair and skin in:

- Shampoos
- Conditioner
- Body washes
- Liquid soaps
- Cleansing

Suggested Concentration

- 0,5-2% Amylomer™ H-Care005
- Contains about 3,5% electrolytes (sodium chloride, lactic acid)

Formulation Tips

Content of sodium chloride increases the viscosity of anionic detergents.

Amylomer™ can be added at any production step, but preferably it should be integrated into the concentrated surfactant solution or after the mixed detergent at pH 6 or lower.

For production of detergent based products we recommend to add Amylomer™ products after the mixed detergent at pH 6 or lower.

Product should be stirred before use.

Packing- Storage-

Store at temperatures between 5°C-25°C in original closed package.

Amylomer™ H-Care005 is available in 22kg pails, 210 kg plastic drums and IBC`s.

Hazardous goods classification

Information concerning

- classification and labelling according to
- regulations for transport of chemicals
- protective measures for storage and handling
- measures in case of accidents and fire
- ecotoxicologica and biodegradability

is given in our safety and technical data sheets

Guidline formulations**Conventional shampoo for European hair**

INCI	% w/w
Aqua	58,51 %
Sodium Laureth Sulfate, 27%	28.00%
Cocamidopropyl Betaine	11.00%
Sodium Benzoate	0.3%
Potassium Sorbate	0.2%
Amylomer™ H-Care005	1.5%
Citric Acid	0.48%

Preparation:

Blend ingredients in the given order.

Adjust pH-value with citric acid to pH 4.5-5.0

Natural shampoo for European hair

INCI	% w/w
Aqua	59.85%
Coco-Glucoside	23.00%
Sodium Coco Sulfate	8.0%
Cocamidopropyl Betaine	6.0%
Sodium Benzoate	0.3%
Potassium Sorbate	0.2%
Amylomer™ H-Care05	1.5%
Citric Acid	1.15%

Preparation:

Blend ingredients in the given order.

Adjust pH-value with citric acid to pH 4.5-5.0.

This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could be used

Gräfe Chemie GmbH
Deichstraße 48-50
20459 Hamburg, Germany
Phone: +49 (0) 40 7602638
info@graefe-naturchemie.de
www.Graefe-Chemie.de