

## Technical Bulletin

## Amylomer™ HA-CAT 75

## Derived natural eco-friendly hair and skin conditioning agent

## Description of the product

Derived natural 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 and well conditioned hair feel. Can be used for hair and skin for eco-friendly hair and body shampoos.

## INCI

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

## Chemical and physical properties

|                            |                             |
|----------------------------|-----------------------------|
| Appearance                 | Light yellow                |
| Total Solids               | 40 % ± 1%                   |
| Gardner colour             | < 2                         |
| Viscosity 20°C, Brookfield | 350-550 mPas<br>(Sp2,30rpm) |
| pH-value DIN 19268         | ~ 3,5 – 4,1                 |
| Cationic D.S.              | ~ 0,75                      |

## Intended use

Hair conditioning, antistatic, emulsion stabilising, viscosity controlling, film forming, humectant 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
- Easy to use due to its liquid form
- To achieve soft and silky feel even at the end of very dry hair
- Excellent rinse-off properties with very low water flow friction

## Properties

Amylomer™ HA-CAT 75 is a liquid potato starch based conditioner. It improves conditioning properties like wet and dry comb and wet and dry feel, without weighing down the dry hair. It can fir synergies with other polymers, like Polyquaternium-10 and Silicon derivates. It is an environment-friendly alternative to synthetic conditioners

## Combing force reduction

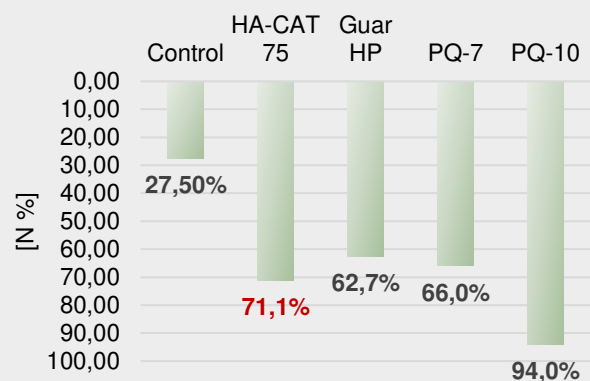


Abb. 1: Combing force result in wet hair  
European bleached hair, basis test formulation: 9% SLES/ 3% CAPB/ 1% Glycerin, Sodium Levulinate, Sodium Anisate/ 0,4% active cationic polymer

## Application

Amylome™ HA-CAT 75 is used as a conditioning agent for hair and skin in:

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

## Suggested Concentration

- 0,3 – 1,5% Amylomer™ HA-CAT 75
- Contains about 3,5% electrolytes (sodium chloride, lactic acid)

## Formulation Tips

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

Product should be stirred before use

## Packing- Storage-

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

Amylomer™ HA-CAT 75 is available in 22kg pails and 210 kg plastic drums.

**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
- toxicological and ecotoxicologica

is given in our safety and technical data sheets

**Natural Shampoo for European hair**

| INCI                   | % w/w  |
|------------------------|--------|
| Aqua                   | 60.35% |
| Coco-Glucoside         | 23.00% |
| Sodium Coco Sulfate    | 8.0%   |
| Cocamidopropyl Betaine | 6.0%   |
| Sodium Benzoate        | 0.3%   |
| Potassium Sorbate      | 0.2%   |
| Amylomer™ HA-CAT 75    | 1.0%   |
| Citric Acid            | 1.15%  |

Preparation:

Blend ingredients in the given order.  
Adjust pH-value with citric acid to pH 4.5-5.0.

**Guidline formulations****Conventional Shampoo for European hair**

| INCI                        | % w/w   |
|-----------------------------|---------|
| Aqua                        | 59.01 % |
| Sodium Laureth Sulfate, 27% | 28.0%   |
| Cocamidopropyl Betaine      | 11.0%   |
| Sodium Benzoate             | 0.3%    |
| Potassium Sorbate           | 0.2%    |
| Amylomer™ HA-CAT 75         | 1.0%    |
| Citric Acid                 | 0.48%   |

Preparation:

Blend ingredients in the given order.  
Adjust pH-value with citric acid to pH 4.5-5.0

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**GRÄFECHEMIE**

ADDITIVES FROM PLANT-BASED RAW MATERIALS