

Technical Bulletin

Amylomer™ CAT 531 AS+ (Starch Hydroxypropyltrimonium Chloride)

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

INCI

Aqua; Starch Hydroxypropyltrimonium Chloride; Urea; Sodium Lactate; Lactic Acid; Sodium Chloride; Sodium Benzoate

Chemical and physical properties

Appearance	Clear to slightly hazy
Molecular weight	~ 5700 kDa
Dry content	32% ± 1%
Gardner colour	< 2 - 4,5
Viscosity 20°C, Brookfield	500 - 1000 mPas, (Sp.3/60U/min)
pH-value DIN 19268	3.4 – 4.3
Cationic D.S.	~ 0,5

Intended use

Conditioning, antistatic, emulsion stabilising, viscosity controlling agent, conditioning for hair and skin for ecofriendly hair and body shampoos

Advantages

- Substantive to hair and skin
- Improves combability and feel of wet and dry hair
- Reduction of hair porosity
- Improves foam touch and wet feel
- Soft and silky feel even at the end of very dry hair
- Gives slightly Hold to the hair at about 2% and higher
- Supports curl retention
- Supports more even hair colourization, better lasting of pigments more intense colour results
- High compatibility with anionic surfactant systems and other key ingredients.

Packing- Storage-

Store at temperatures between 5°C-25°C in original closed package. Amylomer™ CAT 531 AS+ is available in 22kg pails, 210 kg plastic drums and IBC's.

Properties

Amylomer™ CAT 531 AS+ is a liquid potato and rice 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 is an environment-friendly alternative for conditioning shampoo (see figure 1).

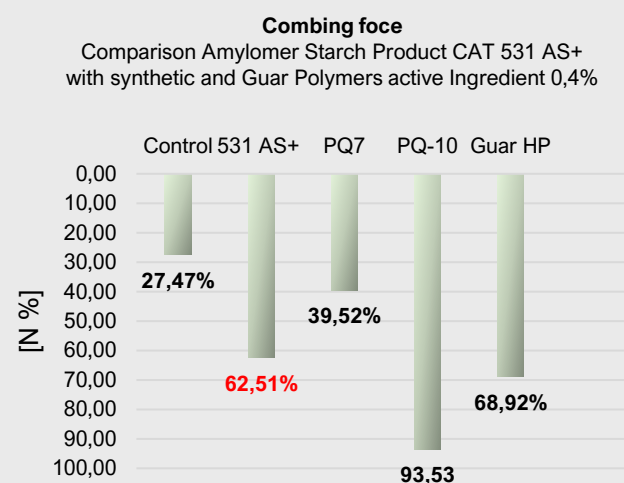


Abb. 1: Combing force result in wet hair

European bleached hair, basis test formulation: 9% SLES/ 3% CAPB/ preservation / 0,4% active cationic polymer

Application

Amylomer™ CAT 531 AS+ is used as a conditioning agent for hair and skin:

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

- Readily biodegradable: OECD 301 (28 days) 64.26%
- Low aquatox (Daphina): 53 mg/L (OECD 202)

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

Guideline formulations

Conventional shampoo for European hair

INCI	% w/w
Aqua	57.51%
Sodium Laureth Sulfate, 27%	28.00%
Cocamidopropyl Betaine	11.00%
Sodium Benzoate	0.30%
Potassium Sorbate	0.20%
Starch Hydroxypropyltrimonium Chloride	1.50%
Citric Acid	0.49%

Preparation:

Blend ingredients in the given order.

Adjust pH-value with citric acid to pH 4.3-4,7.

Remarks: Viscosity (Haake, 20°C, RV4, 10 rpm): 3600 - 6300 mPas.

Natural shampoo for European hair

INCI	% w/w
Aqua	58.50%
Coco-Glucoside	23.00%
Sodium Coco Sulfate	8.00%
Cocamidopropyl Betaine	6.00%
Sodium Benzoate	0.30%
Potassium Sorbate	0.20%
Starch Hydroxypropyltrimonium Chloride	1.50%
Citric Acid	1.50%

Preparation:

Blend ingredients in the given order.

Adjust pH-value with citric acid to pH 4.3-4,7.

Remarks: Viscosity (Haake, 20°C, RV5, 10 rpm): 11000-26000 mPas.

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