

# CATIONIC STARCH



## Product Bulletin

**PQ-TCS11** (Cationic Starch)  
STARCH HYDROXYPROPYLTRIMONIUM  
CHLORIDE

### Description

Starch has more advantages such as cheap, regeneration, abundance, biodegradability, green protection etc. than the oil chemical materials in chemical industry. It is one of the most important reproduction resources. The cationic starch is one of the most important derivations of starch.

PQ-TCS11 has high cationic degrees, the starch grain can be bibulous become loose state at low crystallization temperature (25 °C ). The starch molecules can form a mesh aqueous gel after absorbing, which shows the cold water soluble performance.

PQ-TCS10 has a unique microscopic molecular characteristics, such as branch chain quaternary ammonium salt and high degree stretching of molecular chain. This made the active groups more easily close to hair fiber, and it can form a “free breathing” film on hair, and generate good styling, protection, condition and lubricity. It can make the hair soft and foam Exquisite. When used in shampoo formulas, it can improve the hair comb performance, and used in bath products, it can enhance skin moist feeling, and used in skin cream, it can enhance skin moisturizing properties, silky feeling.

### Specification

Parameter	Value
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Appearance	White powder
pH value (25 °C, 1%soln)	5.0-8.0
Loss on drying(%)	≤14.0
Nitrogen content (%)	0.8-1.4

These values indicate typical specifications, they are not intended to be used as product specifications.

### Properties

- Affinitive to keratin of hair and skin, and no irritation
- Form a natural “free breath” film on hair with styling, protection, condition and lubricity
- Excellent anti-static and conditioning performance. Improve dry & wet combability of hair
- Good cold water solubility

### Applications

Shampoo, styling products

### Formula Guidelines

Typically used at a level of 0.1-3.0%

### Storage

Keep in cool, dry, ventilated and lightless place.

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