

# Polyquaternium 7 (PQ-7)

Cationic conditioner for hair care

## Product Description

Polyquaternium-7 (PQ-7) is a cationic conditioning polymer used in shampoos, conditioners and hair styling products to improve manageability and reduce static.

## Certificate of Analysis

HSN Code: 3906.90

CAS Number: 26590-05-6

Classification: Cosmetic Ingredient – Cationic

| Parameter                   | Specification                                          | Test Method              |
|-----------------------------|--------------------------------------------------------|--------------------------|
| Appearance                  | Clear to slightly hazy colorless to pale yellow liquid | Visual                   |
| Active Content              | 7.0–9.0%                                               | Gravimetric / Titration  |
| Viscosity                   | 50–500 mPas                                            | Brookfield LVT at 25°C   |
| pH                          | 3.5–5.5                                                | Potentiometry            |
| Density                     | 1.01–1.03 g/cm <sup>3</sup>                            | Hydrometer               |
| Color (APHA)                | "d 5 0                                                 | Hazen scale              |
| Quaternary Nitrogen Content | Conforms to specification                              | Potentiometric titration |
| Heavy Metals                | "d 2 0 p p m                                           | ICP-MS                   |

## Physical Properties

Appearance: Clear to slightly hazy colorless to pale yellow liquid

Odor: Mild characteristic odor

Solubility: Freely soluble in water

Packing: 25 kg / 200 kg HDPE drums; IBC 1000 L

Storage: Store in cool, dry, well-ventilated area between 5–30°C. Protect from frost and extreme heat. Keep containers sealed.

## Safety & Handling

PPE: Gloves and safety goggles

Hazards:

- Mild skin and eye irritant
- Harmful to aquatic organisms