



## Hair Maintenance with ALPHA-STEP® PC-48

Formulators seeking multifunctional performance in hair care maintenance will find ALPHA-STEP PC-48 a powerful ally. It not only supports moisture retention but also delivers static control and solubilizes fragrance — key for today's scent-driven consumers. This versatile ingredient helps create sensorially rich, high-impact formulations.



Meets Whole Foods Market®  
Premium Body Care Standards  
Soft skin after-feel



94% bio-based  
Readily biodegradable



CleanGredients® listed  
High amount of light  
and airy foam

**INCI Name** Sodium Methyl 2-Sulfolaurate (and)  
Disodium 2-Sulfolaurate

**Appearance** Clear, yellow liquid

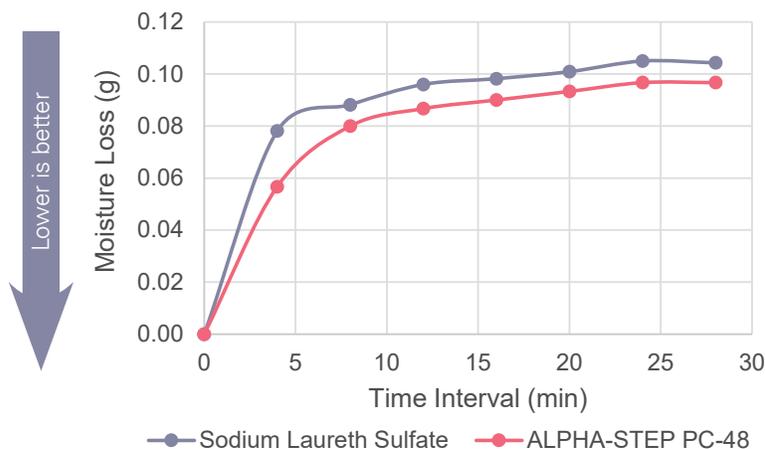
**Actives** 37-40%

**Preservative** Not Required

## Hair Care Performance

### Moisture Retention

ALPHA-STEP PC-48 demonstrates significantly less moisture loss compared to Sodium Laureth Sulfate, making it an ideal choice for formulators seeking superior hydration benefits.



### Static Reduction

ALPHA-STEP PC-48 exhibits lower hair static compared to Sodium Laureth Sulfate, perfect for shampoo formulators making anti-static claims.



Hair tresses washed under 1,000 ppm hard water for 10 cycles (1 cycle: wetting-shampooing-rinsing-drying). Treated hair tresses dried overnight at room temperature. Initial weight of tress recorded and compared to final weight after time in 45°C oven. Shampoo formulas: 10% active surfactant, 5% active Cocamidopropyl Betaine.

## The Power of Scent

The allure of hair care products often lies in their captivating fragrances, yet formulators face significant challenges in solubilizing these scents effectively. ALPHA-STEP PC-48, with its unique hydrotropic properties, offers a solution by enhancing the solubilization of fragrances and essential oils, ensuring your products smell as delightful as they look.



Expect super clear appearance with ALPHA-STEP PC-48 at 1% fragrance, unlike other surfactants, which result in undesirable haziness.

Chassis evaluated is 10:1 actives ratio of anionic surfactant to fragrance. Samples are charged first with water, then surfactant, followed by fragrance.

## Formulation Inspiration

Let Stepan jump-start your next development project with these hair care concepts.

### Concentrated Shampoo

Formulation No. 1435

This formula minimizes water and utilizes ALPHA-STEP PC-48 for luxurious foam profile and scalp moisture retention. STEPAN-MILD® L3, a natural emollient, ensures a light after feel.

Sodium Laureth Sulfate



Foam morphology via loofah evaluation and bubble size via Dynamic Foam Analysis of surfactants at 0.1% actives.

ALPHA-STEP PC-48



### Economy Sulfate-Free Shampoo or Body Wash

Formulation No. 1112

This shampoo harnesses the power of ALPHA-STEP PC-48 and AMPHOSOL® CDB-HP to deliver a gentle yet high-foaming experience, perfect for maintaining healthy hair. The formula's versatile properties make it an excellent base chassis for a body wash as well.

**Visit [Stepan's website](#) to learn more about ALPHA-STEP PC-48 or [Contact Us](#) for personalized formulation support.**

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