



Co-Wash (Low Poo Cleansing Conditioner)

“Co-washing” is the abbreviated term for “conditioner washing”. It’s made to cleanse like shampoo, but formulated with significantly less surfactants. It leaves the hair and scalp feeling clean. The formula is based on the **Low-Surfactant & High-Methocel (LSHM)** Personal Cleansing System developed by Dow Personal Care. It creates good foam quality formulations, with low irritation/improved mildness and enhanced fragrance deposition. This cleansing conditioner is preserved with **Kem NK**, effective at pH no higher than 5.5, which offers high antimicrobial efficacy and low in-use cost. **L-Arginine** is a primary component of hair keratin and through its use enhances hair flexibility and tensile strength.



	Trade name	INCI name	Supplier	%
A	1 Methocel™ 40-0202	Hydroxypropyl Methylcellulose	Dow Personal Care / Univar*	1.00
	2	Water (Aqua)	Univar*	58.65
	3 NaOH (33%)	Sodium Hydroxide	Univar*	0.05
B	4 Emal® 270 D	Sodium Laureth Sulfate	Kao Chemicals Europe / Univar*	10.00
	5 Betadet® HR	Cocamidopropyl Betaine	Kao Chemicals Europe / Univar*	7.50
C	6 Ucare™ JR400	Polyquaternium 10	Dow Personal Care / Univar*	0.20
	7	Water (Aqua)	Univar*	9.80
D	8 Industrial Salt Unsieved	Sodium Chloride	Akzo Nobel / Univar*	2.00
	9	Water (Aqua)	Univar*	8.00
	10 L-Arginine L-Aspartate	Arginine Aspartate	Evonik / Univar*	1.00
E	11 Kem NK	Phenoxyethanol, Sodium Benzoate, Potassium Sorbate, Aqua	Akema / Univar*	0.50
	12 Pomme Citron SY149743	Parfum / Fragrance	Kao Fragrances / Univar*	0.25
	13 Neelicert FD&C Yellow 5 (0.1% in water)	CI 19140	Univar Colour	0.85
	14 36002 Edicol Ponceau 4R (1% in water)	CI 16255	Univar Colour	0.20

* Please contact your regional Univar sales representative to ensure that mentioned products are distributed in your country.

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Procedure

1. Disperse slowly Methocel™ in water. When it is homogeneous, add 1 drop of sodium hydroxide to hydrate the cellulosic agent.
2. Add phase B to the main vessel while mixing
3. Slowly add the dry powder of Polyquaternium-10 into agitated room temperature water. Allow it to mix until the solution is uniform and clear. Hydration can be accelerated by heating the solution to 65°C or by increasing the alkalinity of the solution.
4. Add C to A/B while stirring.
5. In a separate vessel, blend D until uniform. Add it to A/B/C.
6. Add E in order to the batch.
7. Check the pH (<5.5) and adjust if necessary.

Stability

Stable at least 2 months at room temperature and 40°C (still ongoing).

Comments

- Viscosity (spindle 4; 4 rpm; 1 min) = 34,800 cPs (69.5%)
- pH = 5.46
- Slightly hazy low poo cleansing conditioner based on 8.25% surfactants only (which represents approx. the half of the typical surfactant levels). The formula is based on the Low-Surfactant & High-Methocel Personal Cleansing System developed by Dow Personal Care. The system helps to create good foam quality formulations with low irritation/ improved mildness and enhanced fragrance deposition with less fragrance.
- Cost effective formula