

C-162

SHAMPOO

COLOUR PROTECTION

GUIDELINE FORMULARY

DESCRIPTION

Shampoo for colored hair
Cleanses without stripping, fading or dulling color
Improves color shine
Very mild formulation

COMPOSITION

	%
AKYPO® FOAM RL 40	15.0
BETADET® S-20	9.0
DANOX® PL-10	4.0
AMIDET® APA-22	1.5
Cationic Amino Quaternized Silicone Terpolymer ⁽¹⁾	1.0
PEG-150 Distearate ⁽²⁾	0.4
Carbomer ⁽³⁾	0.3
Polyquaternium-10 ⁽⁴⁾	0.2
KAO Fragrance	q.s.
Preservative	q.s.
Lactic Acid	q.s.
Deionized Water	Up to 100

- (1) Silsoft® Q from Momentive
(2) Aculyn® 60 from Rohm & Haas
(3) Carbopol® Ultrez 21 from Lubrizol
(4) Ucare® Polymer JR-30M from Dow Chemical

TECHNICAL CHARACTERISTICS

Kao Method

APPEARANCE (20°C):	White pearled viscous liquid	KCSA-258
pH (as it is):	Approx. 5.5	KCSA-014
VISCOSITY BROOKFIELD (20°C, cP):	Approx. 16,000	KCSA-227
STABILITY TEST:	Correct	(1 month 40°C/RT/5°C)

RECOMMENDED OPERATIVE METHOD

Heat the water up to around 70°C. Add Polyquaternium-10 to the Deionized Water and stir until a clear solution is obtained.

Add AKYPO® FOAM RL40, BETADET® S-20 and AMIDET® APA-22. Homogenize after each addition. Cool down below 40°C. Add Silicone, Carbomer dispersed in water (30% of water), PEG-150 Distearate and DANOX® PL-10.

Add the rest of additives: preservative (soluble), perfume (15 minutes of agitation are usually needed to solubilize it), dyes (diluted in water), other (extracts, etc).

Adjust pH (it is recommended to use citric or lactic acid, and diluted sodium hydroxide if an increase is necessary).

Adjust the final desired viscosity using PEG-150 Distearate.

COMPONENTS

AKYPO® FOAM RL 40 (Sodium Laureth-5 Carboxylate, ≈ 60% a.m.): crypto-anionic character, it combines the properties of the anionic and non-ionic surfactants. Mild foam-booster for Personal Care products. Produces a rapid foam and improves the foam behaviour of cleansing products when used as co-surfactant.

AMIDET® APA-22 (Behenamidopropyl Dimethylamine, ≈ 100% a.m.): non-ionic character. High conditioning surfactant at acid pH, with substantive properties. It provides smoothness and anti-static effect to the hair. It also acts as a thickener in shampoo formulations.

BETADET® S-20 (Lauryl Hydroxysultaine, ≈ 38% a.m.): amphoteric character. Very mild co-surfactant. It decreases the irritation level of anionic surfactants, improving the quality of the foam and performing also as a thickener. It improves the stability of the formula at extreme pH's and low temperature.

DANOX® PL-10 (pearling concentrate, ≈ 52% dry matter): anionic and non-ionic character. Nitroso-amines free product (its composition doesn't contain any Nitrogen derivative). It allows modifying the final appearance of the formula, providing it with a beautiful pearled appearance. No heating is needed. Ecological product. Suggested dosage: 3 - 10%.

The information and recommendations in this publication are to the best of our knowledge reliable. However, nothing herein is to be construed as a warranty or representation. Users should make their own tests to determine the applicability of such information or the suitability of any products for their own particular purpose.

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