

Leverkusen, 21.03.2014

Cosmetic Formulation: Luxurious Shine Shampoo "thermal protection and shine"
with Silsoft AX-E
MMMD512

	Weight-%	INCI	Ingredient / Trade name	Function
A	ad 100	Aqua	Water	Solvent
	9	Sodium Lauroyl Methyl Isethionate	Iselux® LQ-CLR-PE (32%) ²	Surfactant
	1	Cetrimonium Chloride	Dehyquart A CA (25%) ³	Surfactant
B	2	Cocamide MEA	Comperlan 100 ³	Surfactant
	0,5	Cetylalcohol	Lanette 16 ³	Conditioning aid
	3	Glycol Distearate	Cutina AGS ³	Pearlescent agent
C	3	Acrylates Crosspolymer-4	Aqua SF-2 ⁴	Thickener
		Sodium Hydroxide	pH = 6.5-6.8	Neutralizer
D	10	Aqua	Water	Solvent
	0,1	Hydroxypropyl Trimmonium Chloride	Jaguar Excel ⁵	Conditioning aid
E	0,1	Hydrolyzed Keratin	Nutrilan Keratin WPP ⁶	Protein
	2	Bis-Cetearyl Amodimethicone (and) Ceteareth-7 (and) Ceteareth-25	Silsoft AX-E (40%) ¹	Conditioning aid
	1	Synthetic Fluorophlogopite (and) Titanium Dioxide	SunShine Super Gold ⁷	Shine enhancer
	1	Phenyltrimethicone	SF1550 ¹	Shine enhancer
F	3	Cocamidopropyl- Betaine	Dehyton K (30%) ³	Surfactant
G	0,3	Parfum	Fragrance ⁸	Perfume
	0,5	Phenoxyethanol (and) Ethylhexylglycerin	Euxyl PE 9010 ⁹	Preservative
H	max. 0,6	NaCl	adjust visc. to about 5000 cst	
		Citric Acid	pH =6	

Procedure:

- 1) Mix all ingredients of A and heat @70°C.
- 2) In a separate container mix phase B @70°C
- 3) In a separate container mix D
- 4) Mix A+B under stirring, homogenize with Ultra Thurax (~9500 rpm) for 1-2min and let cool down.
- 5) Add Aqua SF-2. Neutralize with Sodium Hydroxide to pH=6.5-6.8
- 6) Slowly add D and all ingredients of E, one at time
- 7) Add F
- 8) Add perfume and preservatives as desired.
- 9) Adjust pH and viscosity with liquid solutions of NaCl and citric acid. Max. NaCl: 0,6% of the formulation due to saltcurve.

Suppliers:

- ¹ Momentive Performance Materials GmbH
- ² Innospec
- ³ BASF
- ⁴ Lubrizol
- ⁵ Solvay
- ⁶ Croda
- ⁷ Sun Chemical
- ⁸ Symrise
- ⁹ Schülke & Mayr

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