

Hair Shampoo < Transparent > AGHS-9

a SLES free hair shampoo formulation containing **AMILITE** GCK-12H as a cleansing surfactant. "Volume-up" and "Manageability" can be achieved.

| | Trade name | INCI Name | wt % | Function |
|-------|----------------------|--|--------|-------------------------|
| Α | AMILITE GCK-12H | Potassium Cocoyl Glycinate, Potassium Cocoate, Water (30%) | 8.5 | Cleansing surfactant |
| В | Merquat 280NP *1 | Polyquaternium-22, Water (43%) | 1.5 | Hair conditioning agent |
| С | Plantacare 1200UP *2 | Lauryl Glucoside, Water (50%) | 12.5 | Cleansing surfactant |
| | Plantacare 2000UP *3 | Decyl Glucoside, Water (50%) | 1.5 | Co-surfactant |
| | SOFTAZLINE CPB *4 | Cocamidopropyl Betaine, Water (30%) | 17.0 | Co-surfactant |
| D | EDTA-2Na | EDTA-2Na | 0.1 | Stabilizer |
| Ε | CITRIC ACID *5 | Citric Acid (10%aq.) | 4.5 | pH adjuster |
| | WATER | Water | To 100 | |
| F | Preservative | Preservative | q.s. | Preservative |
| | Fragrance | Fragrance | q.s. | Fragrance |
| | | | | |
| | | | | |
| | | | | |
| Total | | | 100.0 | |

^{*1} Lubrizol, *2 BASF, *3 BASF, *4 Kawaken Fine Chemical

<PROCEDURE>

- 1. Mix part C and D at 60 °C with stirring until uniform.
- 2. Add part A to part C at 60 °C.
- 3. Add part B to part C at 60 °C.
- 4. Cool down to room temperature with stirring and add part E to adjust pH6.5.
- 5. Add part F at room temperature, resulting in the final formulation.

<PHYSICAL PROPERTIES and STABILITY>

Appearance: Liquid

pH: 6.5

Viscosity: 10~20Pa·s (B type, rotor No.2, 30rpm, 30sec., 25°C)

Stability: 0°C, 25°C, 40°C, 50°C, Cycle, 1 Months

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^{*5} the level of citric acid is presented as a rough guide