

Development formulation

Sodium Hydroxide Hair Relaxer C834

Straightening by chemical means is a popular treatment for ethnic hair. Tight curls are effectively straightened to give sleek styles. Products used include sodium hydroxide and related chemicals, formulated into a heavy cream which is applied to hair for a set period, before being rinsed off and neutralised with an acidic shampoo. The aggressiveness of hair relaxers can be controlled by including varying levels of mineral oil and white petroleum jelly, emulsified in this formulation by Polawax GP200. As a nonionic emulsifying wax Polawax GP200 is an ideal inert base for the delivery actives and is chemically stable at extremes of pH. Solan E is a lanolin derivative included as a superfatting agent to help restore lipids stripped from the hair during relaxing.

		% by wt
POLAWAX GP200 (Nonionic Emulsifying Wax)	Croda	15.0
Heavy Liquid Paraffin BP (Paraffinum Liquidum)	-	10.0
White Petroleum Jelly Continental Grade 3 (Petrolatum)	-	8.0
VOLPO N10 (Oleth-10)	Croda	2.0
CRODACOL S95 (Stearyl Alcohol)	Croda	1.0
Water Deionised (Aqua)	-	to 100
Propylene Glycol	-	2.0
SOLAN E (PEG-75 Lanolin)	Croda	0.5
Sodium Hydroxide (25% Aqueous Solution)	-	*
Perfume, Preservative	-	qs

* Mild 7.50%
Regular 8.50%
Strong 9.50%

Method

Heat oil phase and water phase separately (except Sodium Hydroxide) to 60-65°C. Add water phase to oil phase with stirring. Stir to cool adding perfume and Sodium Hydroxide solution at 40-45°C. Continue to stir and fill off.

Non-warranty

This formulation has been subjected to limited stability tests and has been shown to perform well. However formulators adopting this approach should ensure to their own satisfaction long term stability and functionality. It is good practice to conduct safety tests on all final formulations prior to marketing. Suggested uses should not be taken as an inducement to infringe any existing patents.

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