

# protective shampoo

formula #: 10976-94

material #:

ingredients (trade name   INCI name)		%w/w	supplier
Deionized Water	Aqua (water)	62.7000	Local
Miranol* C2M CONC. N.P.	Disodium cocoamphodiacetate	12.0000	Solvay Novecare
Mirataine* CB	Cocamidopropyl Betaine	3.5200	Solvay Novecare
Standapol* ES-2	Sodium Laureth Sulfate	17.0000	BASF
Maprosyl 30	Soidum Lauryl Sarcosinate	1.7000	Stepan
Escalol™ HP UV filter	DimethylPABAmidopropyl Laurdimonium Tosylate	1.5000	Ashland
Liquid Germall™ Plus preservative	Propylene Glycol (and) Diazolidinyl Urea (and) Iodopropynyl Butylcarbamate	0.5000	Ashland
Citric Acid (20% Solution)	Citric Acid	1.0800	Local
total		100.00	

## procedure

1. Add the Water to side vessel, and heat to 65-70C.
2. In the larger batch vessel, premix the surfactants and Escalol HP. Use a slow sweep mix to avoid aeration, and gently heat to 65-70C, mixing until clear and uniform.
3. Add the heated Water and continue to mix until uniform.
4. Mix and cool batch to 35C. Add Liquid Germall Plus.
5. Measure pH below 30C, add 20% Citric Acid as needed to desired pH.
6. Continue mixing until uniform and cool to room temperature.

## typical properties

description: clear, viscous, pourable liquid

pH: 6.5+/-0.25

viscosity: 7,000-8,000 cP (Brookfield LVT, Sp #3, 12 rpm, 1 min, 25C)

stability/challenge information: This formula passed standard stability protocol and micro challenge testing. The preservative system, however, has not been optimized to its lowest effective level.

The information contained in this document and the various products described are intended for use only by persons having technical skill and at their own discretion and risk after they have performed necessary tests and evaluations of the products and their uses. All statements, information and data presented herein are believed to be accurate and reliable, but are not to be taken as a guarantee, an express warranty, or an implied warranty of merchantability or fitness for a particular purpose, or representation, express or implied, for which Ashland and its subsidiaries assume legal responsibility. A purchaser must make its own determination of a product's suitability for purchaser's use, the protection of the environment, and the health and safety of its employees and customers. We make no warranty against infringement of any patents by reason of purchaser's use of any product or formulation described in this document.

© Registered trademark, Ashland or its subsidiaries, registered in various countries. ™Trademark, Ashland or its subsidiaries, registered in various countries. \*Trademark owned by a third party. © 2018, Ashland.

Date: 7/18/2017