

Formulation

Name	HIGH-FOAMING, PREMIUM SULFATE-FREE SHAMPOO	
No.	1158	
Description	The formulation delivers exceptional foaming and good conditioning properties.	
Formulation	INGREDIENTS:	<u>% by Weight</u> <u>Functionality</u>
	STEPAN-MILD® LSB	26.70 Primary Surfactant
	LATHANOL® LAL POWDER	1.43 Surfactant
	ALPHA-STEP® PC-48	5.25 Surfactant
	AMPHOSOL® HCG (or AMPHOSOL® HCG-HP)	13.10 Secondary Surfactant, Thickener
	STEPAN-MILD® GCC	1.00 Foam Booster, Thickener
	Sodium Chloride	q.s. Viscosity Builder
	Citric Acid	q.s. pH Modifier
	Deionized Water	q.s. to 100.00 Carrier
	Fragrance, Dye, and Preservative	q.s. Additive
	Total	100.00
Procedure	<ol style="list-style-type: none"> 1. Charge Deionized Water in a suitable vessel equipped with heating and agitation capabilities. 2. While agitating, heat water to 55°C–60°C (131°F–140°F) then add STEPAN-MILD® LSB and LATHANOL® LAL Powder. Mix well until solubilized. 3. Cool down to 40°C–45°C (104°F–113°F). Add AMPHOSOL® HCG (or AMPHOSOL® HCG-HP), while continuing agitation. 4. Add STEPAN-MILD® GCC. Mix well. 5. Cool batch to 25°C (77°F). Adjust pH with Citric Acid. 6. Add Fragrance, Dye, and Preservative. 7. Adjust viscosity with Sodium Chloride, if necessary. <p>*Note: When formulating with AMPHOSOL® HCG-HP, a greater amount of Citric Acid may be needed to adjust the pH within the recommended range as noted, than when formulating with AMPHOSOL® HCG.</p>	
Physical Properties	Appearance at 25°C	Clear liquid
	pH, as is	4.8–5.0
	pH, after adjustment	5.5–5.8
	Viscosity at 25°C, cps	4,100–4,500
Storage/ Stability	4 weeks at 25°C	Stable
	4 weeks at 4°C	Stable
	4 weeks at 50°C	Stable
	Freeze/thaw 3 cycles	Pass
Instructions for Use	Apply the product to wet hair. Lather, then rinse thoroughly.	
	This is a high-foaming shampoo having a light conditioning effect.	
External Comment	Marketing Notes: BCI = 69. Total Biorenewable Carbon Index (BCI) was calculated only for the Stepan surfactants used in this formulation. LATHANOL® LAL Flake can be used as a	

replacement for LATHANOL® LAL Powder. For further information on Stepan's BCI, visit www.stepan.com. STEPAN-MILD® GCC is ECOCERT certified. For more information on ECOCERT, visit www.ecocert.com. Sulfate free is defined by Stepan as containing no Alcohol Sulfates and no Alcohol Ether Sulfates as per the INCI Nomenclature.

Registered
Trademarks
of Stepan
Company

STEPAN-MILD®
LATHANOL®
ALPHA-STEP®
AMPHOSOL®

For
Additional
Assistance

For applications or product handling assistance, call our Technical Service Department at 1-800-745-7837 (U.S.) or 011-334-76-505-100 (Europe).
For ordering assistance, call our Account Service Department at 1-800-457-7673.

The information contained herein is based on the manufacturer's own study and the works of others and is subject to change without prior notice. The information is not intended to be all-inclusive, including as to the manner and conditions of use, handling, storage or disposal or other factors that may involve additional legal, environmental, safety or performance considerations. Nothing contained herein grants or extends a license, express or implied, in connection with any patents issued or pending of the manufacturer or others, or shall be construed as a recommendation to infringe any patents or to violate any applicable laws. **STEPAN COMPANY MAKES NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR USE, AND NO WARRANTY OR GUARANTY OF ANY OTHER KIND, EXPRESS OR IMPLIED, IS MADE, INCLUDING REGARDING PERFORMANCE, SAFETY, SUITABILITY, STABILITY, ACCURACY, COMPLETENESS, ADEQUACY OR OTHERWISE.** Stepan Company (and its employees, subsidiaries and affiliates) shall not be liable (regardless of fault) to the vendee, its employees, or any other party in respect of this information, including in respect of its accuracy, completeness, adequacy, furnishing, use, or reliance upon, and the vendee assumes and releases Stepan Company (and its employees, subsidiaries and affiliates) from all liability, whether in tort, contract or otherwise.



Stepan Company
Northfield, Illinois 60093
Telephone (847) 446-7500

Revision Date: 12/19/2016 Publication Date: 12/16/2010 © 2016, Stepan Company. All rights reserved.