

Formulation

Name	TRANSPARENT GLYCERINE SOAP BAR WITH BIO-TERGE® 804 AND AMPHOSOL® HCG	
No.	874	
Description	Transparent soap bar for use in shower, bath, or hand washing.	
Formulation	<u>INGREDIENTS:</u>	<u>% by Weight</u> <u>Functionality</u>
	=== Phase 1 ===	
	Propylene Glycol	18.75 Solvent
	Glycerin (Emery)	6.25 Solvent
	Sorbo 70% Sorbitol Solution (SPI Polyols) Sorbitol	19.00 Solvent
	BIO-TERGE® 804	21.00 Surfactant
	AMPHOSOL® HCG (or AMPHOSOL® HCG-HP)	9.00 Surfactant
	=== Phase 2 ===	
	Stearic Acid (Uniqema)	13.00 Fatty Acid
	Myristic Acid (Uniqema)	6.00 Fatty Acid
	=== Phase 3 ===	
	Sodium Hydroxide, 50% solution	6.00 Neutralizer
	Triethanolamine (TEA)	q.s. Neutralizer
	Citric Acid, 50% solution	q.s. Neutralizer
	Total	100.0
Procedure	<p>1. Add Glycerin, Sorbitol, BIO-TERGE® 804, AMPHOSOL® HCG (or AMPHOSOL® HCG-HP) and Propylene Glycol (Phase 1) to a mixing vessel.</p> <p>2. Begin heating and mixing at 300 rpm. At 140°F (60°C), add Phase 2 ingredients to the mixing vessel. Continue to heat and mix.</p> <p>3. At 165°F (74°C), add Phase 3 slowly to mixing vessel. Mix for about 20 minutes or until mixture is homogenous and transparent.</p> <p>4. Take a small sample and measure Free Fatty Acid content (unreacted (unneutralized) free fatty acid level should be between 0.2% - 0.9%). If Free Fatty Acid content is not within the range, add additional myristic acid or triethanolamine to adjust value between range.</p> <p>*Note: When formulating with AMPHOSOL® HCG-HP, a greater amount of Citric Acid, 50% solution, 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	Transparent soap bar
	pH, 10% aqueous	9-10
	Color	Light yellow
	Free Fatty Acid, % (Stepan Method 050-0)	0.2 - 0.9
Storage/ Stability	Blend - 2 weeks at 25°C	Stable
	Blend - 2 weeks at 55°C	Stable
	Soap Bar - 2 months at 25°C	Stable

Instructions
for Use

Place bar in hand, rotate in water, lather, and rinse.

Registered
Trademarks
of Stepan
Company

BIO-TERGE®
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 

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

Revision Date: 01/19/2017 Publication Date: 11/29/2006 © 2017, Stepan Company. All rights reserved.