

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	INGREDIENTS:	<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.

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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.

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