

# Formulation

Name	<b>SULFATE-FREE, MOISTURIZING GENTLE FOAMING HAND SOAP</b>	
No.	1179	
Description	An instant foaming hand soap that cleanses gently while leaving skin feeling soft and smooth.	
Formulation	<b>INGREDIENTS:</b>	<b><u>% by Weight</u>   <u>Functionality</u></b>
	Deionized Water	q.s. to 100.00 Diluent
	Natrosol 250 HHR (Hercules) Hydroxyethylcellulose	0.05 Thickener
	Glycerin	0.50 Humectant
	ALPHA-STEP® PC-48	16.00 Primary Surfactant
	AMPHOSOL® HCG	3.50 Secondary Surfactant
	STEPAN-MILD® L3	1.50 Emollient
	Fragrance	0.25 Fragrance
	Citric Acid (50% solution)	q.s. pH Adjuster
	Kathon CG (Rohm and Haas) Methylchloroisothiazolinone and Methylisothiazolinone	0.05 Preservative
	<b>Total</b>	<b>100.00</b>
Procedure	<ol style="list-style-type: none"> <li>1. In a suitable vessel equipped with heating and agitation capabilities, charge Deionized Water and begin mixing.</li> <li>2. Sprinkle in Natrosol 250 HHP. Mix until dispersed.</li> <li>3. Add Glycerin, ALPHA-STEP® PC-48, AMPHOSOL® HCG. Mix well.</li> <li>4. Start heating to 45°C.</li> <li>5. Add STEPAN-MILD® L3. Mix until clear.</li> <li>6. Add Fragrance. Mix until clear.</li> <li>7. Cool to room temperature.</li> <li>8. Adjust pH to 5.0–6.0 with Citric Acid (50% solution).</li> <li>9. Add Kathon CG.</li> </ol>	
Physical Properties	Appearance, as is	Clear liquid
	pH at 25°C, as is	5.0–6.0
	Viscosity at 25°C, cps	Water thin
Storage/ Stability	4 weeks at 5°C	Stable
	4 weeks at 25°C	Stable
	4 weeks at 40°C	Stable
	Freeze/Thaw 3 cycles	Pass
Instructions for Use	Apply to wet hands, lather, and rinse.	
External Comment	Marketing Notes: BCI = 89. Total Biorenewable Carbon Index (BCI) was calculated only for the Stepan surfactants used in this formulation. For further information on Stepan's BCI; visit <a href="http://www.stepan.com">www.stepan.com</a> .	
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STEPAN-MILD®

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