



# Formulation

Name	<b>NATURALLY-DERIVED, EO-FREE, MILD BABY WASH</b>	
No.	1164	
Description	This high-foaming baby wash incorporates naturally-derived ingredients that do not contain EO (Ethylene Oxide). This formulation can be used as a shampoo or as a body wash.	
Formulation	<b>INGREDIENTS:</b>	<b><u>% by Weight</u>    <u>Functionality</u></b>
	ALPHA-STEP® PC-48	13.20 Surfactant
	LATHANOL® LAL POWDER	10.00 Surfactant
	AMPHOSOL® HCG	6.53 Secondary Surfactant
	STEPAN-MILD® GCC	0.70 Foam Booster, Thickener
	Sodium Chloride	q.s. Viscosity Builder
	Citric Acid	q.s. pH Modifier
	Deionized Water	q.s.to 100.0 Carrier
	Fragrance, Dye and Preservative	q.s. Additive
	<b>Total</b>	<b>100.00</b>
Procedure	<ol style="list-style-type: none"> <li>1. Charge Deionized Water in a suitable vessel equipped with heating and agitation capabilities.</li> <li>2. While agitating, heat water to 55°C–60°C (131°F–140°F). Add ALPHA-STEP® PC-48 and LATHANOL® LAL Powder. Mix well until solubilized.</li> <li>3. Cool down to 40°C–45°C (104°F–113°F). Then add AMPHOSOL® HCG while continuing agitation.</li> <li>4. Add STEPAN-MILD® GCC. Mix well.</li> <li>5. Cool batch to 25°C. Adjust pH with Citric Acid.</li> <li>6. Add Fragrance, Dye, and Preservative with mixing.</li> <li>7. Adjust viscosity with Sodium Chloride, if necessary.</li> </ol>	
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	4,500–4,800
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 on wet hair or body. Lather, then rinse thoroughly.	
	This is a high-foaming baby wash with good hair detangling properties and a light skin-conditioning effect.	
External Comment	Marketing Notes: BCI = 85; 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 further information on ECOCERT, visit [www.ecocert.com](http://www.ecocert.com).

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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).  
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