



## Sulfate-Free Pearlized Shampoo ARL-24-116-1

<u>PHASE A</u>	<b>% W/W</b>
Deionized Water	42.45
Stepan Mild SL3 BA <sup>3</sup> (Disodium Laureth Sulfosuccinate)	20.00
Bio-Terge AS-40 <sup>3</sup> (Sodium C14-16 Olefin Sulfonate)	20.00
Colateric COAB <sup>4</sup> (Cocamidopropyl Betaine)	8.00
Protachem EGMS <sup>2</sup> (Glycol Stearate)	1.50
<b>PHOENOTAINE<sup>®</sup> C-35<sup>1</sup> (Water (and) Sodium Cocamidopropyl PG- Dimonium Chloride)</b>	3.00
<b>PHOENATE<sup>®</sup> 150 DSA<sup>1</sup> (PEG-150 Distearate)</b>	1.75
<b>DICOPAMINE<sup>®</sup> PC-35<sup>1</sup> (Water (and) Cetrimonium Chloride (and) Dimethicone PEG-7 Phosphate)</b>	1.50
<b>PECOSIL<sup>®</sup> PSQ-418<sup>1</sup> (Water (and) Steardimonium Hydroxypropyl PEG-7 Dimethicone Phosphate Chloride)</b>	1.00
<u>PHASE B</u>	
<b>BIOGEL<sup>®</sup> HEMP SEED BUTTER<sup>1</sup> (Hydrogenated Hemp Seed Oil)</b>	0.50
<u>PHASE C</u>	
Preservative	q.s
FD&C Red#33 <sup>5</sup> (CI 17200) (0.50% aqueous solution)	0.25
FD&C Blue#1 <sup>5</sup> (CI 42090) (0.50% aqueous solution)	0.05
	100.00

1. Phoenix Chemical, Inc.
2. Protameen
3. Stepan
4. Colonial Chemical
5. Sun Chemical

**Procedure:**

In main kettle, charge water and add all components of Phase A. Heat to 70-75°C while mixing until completely homogenous. Begin cooling and add Phase B components at 50-55°C and mix until homogenous. At room temperature add Phase C and mix until homogenous.

<b>INGREDIENT</b>	<b>FUNCTION</b>
<b>PHOENATAINE C-35</b>	Contains conditioning, Mild surfactant and foam enhancer properties.
<b>PHOENATE 150 DSA</b>	Thickening agent for shampoo.
<b>DICOPAMINE PC-35</b>	Provides conditioning, softness and volume to hair.
<b>PECOSIL PSQ-418</b>	Exhibits extreme moisturizing properties.
<b>BIOGEL HEMP SEED BUTTER</b>	Adds conditioning and moisturization properties to hair care products.