151 INDUSTRIAL PARKWAY BRANCHBURG, N.J. 08876 • TEL: (908) 707-0232

## Rinse-Off Hair Conditioner <br> ARL-24-99-1

| PHASE A | \% W/W |
| :---: | :---: |
| Deionized Water | 65.67 |
| Dicopamine ${ }^{\circledR}$ PC-35 ${ }^{1}$ (Water (and) Cetrimonium Chloride (and) Dimethicone PEG-7 Phosphate) | 5.00 |
| Pecosil ${ }^{\circledR}$ SO-9¹ ${ }^{\text {(PEG-9 Dimethicone Phosphate (and) PEG-9 Olivate) }}$ | 5.00 |
| Pecosil ${ }^{\circledR}$ PAN-4181 ${ }^{1}$ (Water (and) Steardimonium Hydroxypropyl Panthenyl PEG-7 Dimethicone Phosphate Chloride) | 5.00 |
| PHASE B |  |
| BIOGEL ${ }^{\text {® }}$ Argan Butter ${ }^{1}$ (Hydrogenated Argania Spinosa Kernel Oil) | 1.50 |
| BIOGEL ${ }^{\text {® }}$ Canola Butter ${ }^{1}$ (Hydrogenated Canola Oil) | 1.50 |
| Lipocol C ${ }^{2}$ (Cetyl Alcohol) | 4.50 |
| Phoenoxol ${ }^{\circledR} \mathbf{T}^{\mathbf{1}}$ (Cetearyl Alcohol (and) Steareth-30 (and) Ceteareth-10) | 3.00 |
| Catemol ${ }^{\circledR}$ 220B ${ }^{1}$ (Behenamidopropyl Dimethylamine Behenate) | 5.00 |
| Pelemol ${ }^{\circledR}$ IN-2 ${ }^{1}$ (Isononyl Isononanoate) | 3.00 |
| PHASE C |  |
| Preservative | q.s |
| PHASE D |  |
| Citric Acid 25\% Aqueous Solution | 0.83 |
|  | 100.00 |

1. Phoenix Chemical, Inc.
2. Vantage Personal Care.

## Procedure:

In main kettle, combine ingredients from Phase A . Mix and begin heating to $70-75^{\circ} \mathrm{C}$. In a separate beaker, combine Phase B and heat to $70-75^{\circ} \mathrm{C}$. When both Phase A and Phase B are at $70-75^{\circ} \mathrm{C}$, add Phase B to Phase A while mixing with prop mixer. Once uniform, switch to sweep blade and begin cooling to $35^{\circ} \mathrm{C}$. Add Phase C. Continue cool down with slow mixing to room temperature. Adjust pH with Phase D.

| INGREDIENT | FUNCTION |
| :--- | :--- |
| Dicopamine PC-35 | Provides conditioning, softness and volume to hair. |
| Pecosil SO-9 | Emollient. It provides conditioning and reduce dry ends. |
| Pecosil PAN-418 | Adds softness, sheen, volume and hydration while enabling hair to withstand <br> breakage. |
| BIOGEL Argan Butter | Provides moisturization and silkiness to hair. |
| BIOGEL Canola Butter | Provides moisturization and silkiness to hair. |
| Phoenoxol T | Emulsifier. |
| Catemol 220B | Mitigates static fly-away as well as improves wet and dry manageability. |
| Pelemol IN-2 | Lightweight ester for emollience. |

