Pieridae Beauty – Skin Firming & Contouring Lotion (PE 9010 Preserved)

# Product Summary

A lightweight, fast-absorbing lotion formulated with DMAE Bitartrate, Guarana Extract, Actigym™, Vanistryl™, and Liporeductyl™ for visible skin firming, toning, and anti-cellulite benefits. Preserved with PE 9010 for broad-spectrum protection.

# Formula – 100 g Batch

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| --- | --- | --- | --- | --- |
| Phase | Ingredient | INCI Name | % w/w | Function |
| A | Distilled Water | Aqua | q.s. to 100 | Solvent |
| A | Glycerin | Glycerin | 3 | Humectant |
| A | DMAE Bitartrate | Dimethylaminoethanol Bitartrate | 3 | Firming active |
| A | Xanthan Gum | Xanthan Gum | 0.3 | Thickener, stabilizer |
| B | Caprylic/Capric Triglycerides | Caprylic/Capric Triglyceride | 6 | Emollient |
| B | Shea Butter | Butyrospermum Parkii (Shea) Butter | 4 | Rich emollient |
| B | Cetearyl Alcohol | Cetearyl Alcohol | 2 | Co-thickener, stabilizer |
| B | Olivem 1000 | Cetearyl Olivate (and) Sorbitan Olivate | 4 | O/W emulsifier |
| C | Guarana Extract (powder, pre-dissolved) | Paullinia Cupana Seed Extract | 2 | Caffeine, energizing |
| C | Actigym™ | Water (and) Maltodextrin (and) Pseudoalteromonas Ferment Extract | 2 | Firming & contouring |
| C | Vanistryl™ | Water (and) Butylene Glycol (and) Darutoside (and) Other actives | 2 | Anti-stretch mark |
| C | Liporeductyl™ | Escin (and) Caffeine (and) other synergistic actives | 3 | Anti-cellulite |
| C | Panthenol (powder, pre-dissolved) | Panthenol | 1 | Moisturizing, soothing |
| D | PE 9010 | Phenoxyethanol (and) Ethylhexylglycerin | 1 | Preservative |

# Manufacturing Instructions

1. Phase A: Disperse xanthan gum into glycerin, add to water, then dissolve DMAE. Heat to 70–75 °C. Adjust pH to ~4.8–5.0 before emulsification.
2. Phase B: Melt oil phase ingredients (Caprylic/Capric Triglycerides, Shea Butter, Cetearyl Alcohol, Olivem 1000) at 70–75 °C.
3. Combine Phase A and Phase B with high shear mixing to form the emulsion. Continue mixing until uniform.
4. Cool to below 40 °C with gentle stirring.
5. Phase C: Prepare Guarana Extract and Panthenol as small water solutions. Add these plus Actigym™, Vanistryl™, Liporeductyl™.
6. Phase D: Add PE 9010 preservative. Recheck pH (target 5.2–5.5). Adjust with 10% NaOH in 0.02–0.05 g increments if needed.
7. Package in airless pumps or squeeze tubes.

# pH Adjustment Log

Record NaOH additions during production:

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| --- | --- | --- |
| NaOH Added (g) | Batch Weight (g) | Resulting pH |