Pieridae Beauty – Gentle Foaming Body Wash (Eczema-Safe)

# Product Overview

A dermatologist-inspired, gentle foaming body wash formulated for dry, eczema-prone, and sensitive skin. This sulfate-free, pH-balanced wash produces a soft foam that cleanses without stripping. Infused with colloidal oatmeal, aloe vera juice, panthenol, and allantoin, it calms irritation, strengthens the skin barrier, and leaves skin soft and comfortable.

# Formula Composition (100 g batch)

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| Ingredient (INCI) | Function | % w/w | Notes |
| Aqua (Water) | Diluent | qs to 100 | Base |
| Aloe Barbadensis Leaf Juice | Soothing/Hydration | 10 | Active water phase |
| Coco Glucoside | Mild surfactant | 10 | Foaming, cleansing |
| Decyl Glucoside | Mild surfactant | 8 | Foaming, cleansing |
| Cocamidopropyl Betaine | Amphoteric surfactant | 6 | Foam booster, reduces irritation |
| Sodium Lauroyl Methyl Isethionate (SurfactPro CC-6) | Mild surfactant | 2 | Replacement for sodium cocoyl glutamate |
| Glycerin | Humectant | 5 | Moisturizing |
| Avena Sativa (Oat) Kernel Flour | Soothing, anti-irritant | 2 | Colloidal oatmeal |
| Panthenol | Humectant/Barrier repair | 2 | Vitamin B5 |
| Olive Oil PEG-7 Esters (or Olivem 300) | Emollient | 2 | Refatting agent |
| Allantoin | Skin protectant | 0.5 | Soothing, anti-irritant |
| Phenoxyethanol (and) Ethylhexylglycerin (PE 9010) | Preservative | 1 | Broad spectrum |
| Citric Acid / Sodium Hydroxide | pH adjuster | qs | Adjust to 5.2–5.5 |

# Manufacturing Instructions

1. Pre-dissolve Panthenol (2%) and Allantoin (0.5%) in a portion of warm Aloe Vera Juice (~40–45 °C). Set aside.  
2. In the main vessel, combine Coco Glucoside, Decyl Glucoside, Cocamidopropyl Betaine, SurfactPro CC-6, Glycerin, and remaining Aloe Vera Juice + water. Stir gently to uniform.  
3. Pre-hydrate Colloidal Oatmeal (2%) in warm water or aloe juice, then add to the surfactant mix.  
4. Add Panthenol/Allantoin solution from Step 1.  
5. Add Olivem 300 (2%). Stir gently.  
6. Cool batch below 40 °C. Add PE 9010 preservative (1%).  
7. Adjust pH to 5.2–5.5 with 10% citric acid or 10% NaOH solution.  
8. Fill into foamer pump bottles.

# Product Claims & Marketing

- Rich, creamy foam without sulfates  
- Soothes eczema-prone & sensitive skin  
- Hydrates & supports barrier repair  
- pH balanced at 5.2–5.5  
- Free from sulfates, parabens, phthalates, dyes, heavy fragrance  
- Cruelty-free

# Testing Protocols

- pH testing: target 5.2–5.5  
- Preservative efficacy (PET/Challenge test)  
- Stability testing at 4 °C, RT, and 40 °C for 12 weeks  
- Microbial testing before release