



A GENTLE CLEANSING with **A PEARL TOUCH**

For Personal Care Formulations

PEARL-ESSENCE BABY SHAMPOO

This formulation is a mild silicone-free pearled baby shampoo with hypoallergenic surfactants. **MACKERNIUM® HQ-400 & GQ-C130S** are key to the consumer use experience of this formula - providing slip, softness and detangling. This sulfate-free formulation taps into the strengths of the Verdant product portfolio, using ingredients that provide sensory and moisturization benefits with **MACKERNIUM® HQ-400 & GQ-C130S**, elevate the appearance with a pearled effect using **MACKESTER® EGDS or GDSV**, and deliver mildness and foam with **MACKAM® ULTRA C-32 & MACKOL™ DG** surfactants.

BENEFITS

- Mild
- Silicone-Free
- Sulfate-Free

TYPICAL PROPERTIES

Appearance at 25 °C:	Pearled Liquid
Viscosity at 25°C, cps:	3,000 – 5,000
pH at 25°C:	6.0 - 7.5

Ingredients	Function	% w/w	Process
Water	Carrier	q.s. to 100	Slowly add MACKERNIUM® HQ-400 powder to water. Heat to 73 - 75°C. Add MACKERNIUM® GQ-C130S , Glycerin, Taurate, Isethionate, MACKESTER® GDSV , & MACKAMIDE® CPA . Mix well between each addition. Begin to cool. At <50°C, add MACKOL™ DG & MG DOE A120KC . Mix well between each addition. Continue cooling slowly. Add balance of ingredients, and adjust pH with citric acid.
MACKERNIUM® HQ-400	Conditioner	0.3	
MACKERNIUM® GQ-C130S	Conditioner	0.2	
MACKAM® ULTRA C-32	Mild Surfactant	25.0	
MACKOL™ DG	Surfactant	16.0	
Sodium Methyl Cocoyl Taurate (30%)	Sulfate-free Surfactant	7.0	
Glycerin	Humectant	2.5	
Sodium Cocoyl Isethionate	Sulfate-free Surfactant	2.0	
MACKESTER® EGDS or MACKESTER® GDSV	Pearlizer	1.5	
MACKOL™ DG & MG DOE A120KC*	Foam Density	2.0	
MACKAMIDE® CPA	Foam Stability	1.0	
Panthenol (optional)	Moisturizer	0.2	
Sodium Benzoate	Preservative	As needed	
Fragrance	Fragrance	As desired	
Citric Acid, dilute	pH adjuster	Adjust to 6.0 - 7.5	

DISCLAIMER

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