

Emollient Shower Gel

CL-B0018

In this streamlined formulation, **Hydramol™* PGPD Ester** serves as the sole thickening agent. This water soluble-thickening agent also delivers residual emolliency to surfactant-based systems. **Hydramol™ PGPD Ester** features excellent compatibility with many of the mild surfactants commonly used in bath and body products.

	INCI Name, Trade Name	Weight %	Function
A.	1. Deionized Water	49.03	Diluent
	2. Disodium EDTA, <i>Protacide NA-2</i>	0.05	Chelating Agent
	3. Sodium Laureth Sulfate (28%, 2 mole), Sulfochem™* ES-2 Surfactant	30.00	Surfactant
	4. Ammonium Lauryl Sulfate (30%), Sulfochem™* ALS Surfactant	10.00	Surfactant
	5. PEG/PPG-8/3 Diisostearate, Hydramol™* PGPD Ester	3.00	Thickener/Emollient
	6. DMDM Hydantoin, <i>Glydant®</i>	0.40	Preservative
B.	7. Sodium Myreth Sulfate (60%, 3 mole), Sulfochem™* ME-60 Surfactant	2.00	Surfactant
	8. Fragrance, <i>Fresh & Clean #PSI-01890</i>	1.00	Fragrance
C.	9. FD&C Blue No. 1 (1% soln), FD&C Blue No. 1	0.01	Dye
	10. D&C Yellow No. 10 (1% soln), D&C Yellow No. 10	0.01	Dye
D.	11. Cocamidopropyl Hydroxysultaine (50%), Chembetaine™* CAS Surfactant	4.50	Surfactant

Procedure:

1. Add water to mixing vessel. Dissolve Disodium EDTA into the water while mixing.
2. Add the remaining ingredients in Part A in the order shown, ensuring that each is completely dissolved before the addition of the next ingredient.
3. Pre-blend Part B and add to batch while mixing.
4. Add color in Part C to match the approved standard.
5. Add Part D and mix until the batch is completely homogenous.

Product Properties:

Appearance Clear, light green

viscous gel

pH 5.5 – 6.5

Viscosity (mPa s)** 3,000 – 7,000

Total Solids (%) 16.0 – 21.0

Specific Gravity (g/ml) 0.97 – 1.02

Turbidity (NTU)*** 0 – 5

Stability: Passed 3 months @ 40 °C, 1 month @ 50 °C, 3 cycles freeze/thaw

**Brookfield RVT @ 20 rpm, 25 °C, #3 spindle, measured @ 24 hours

*** HF Scientific, Inc., Micro 100 Turbidimeter

Supplier References:

Protameen (2)

Noveon, Inc. (3, 4, 5, 7, 11)

Lonza (6)

Premier Specialties, Inc. (8)

Quantum Colours (9, 10)

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