

Clear Bath Gel with Beads

CL-B0016B

This clear bath gel with beads demonstrates the excellent suspending ability and clarity provided by **Carbopol® Aqua SF-1 Polymer**.

INCI Name, Trade Name	Weight %	Function
A. 1. Deionized Water	36.75	Diluent
2. Acrylates Copolymer (30%), Carbopol® Aqua SF-1 Polymer	8.00	Rheology Modifier
3. Sodium Laureth Sulfate (2 mole, 28%), Sulfochem™ ES2- CWK Surfactant	40.00	Surfactant
4. Sodium Hydroxide (18%)	~1.20**	Neutralizer
B. 5. Cocamidopropyl Betaine (35%), Chembetaine™ CAD Surfactant	6.70	Surfactant
6. Polyquaternium-39 (10%), Merquat® Plus 3330	2.10	Conditioner
7. Tetrasodium EDTA, Versene™ 220	0.05	Chelating Agent
8. Phenoxyethanol, Methyl-, Ethyl-, Butyl-, Propyl-, and Isobutylparaben, Phenonip®	0.50	Preservative
C. 9. Fragrance, "Fountain", Fragrance #34314	0.50	Fragrance
10. Polysorbate 20, Protasorb L-20	0.50	Solubilizer
11. FD&C Blue No. 1 (0.1%)	1.85	Dye
12. FD&C Yellow No. 6 (0.1%)	0.85	Dye
13. Vitamin E, Mineral Oil, Mica, Titanium Dioxide, Gelatin, LipoPearl™ LTI-0293 (Color – White)	1.00	Moisturizer

**q.s. to pH 6.6

Procedure:

1. Combine PART A: Add **Carbopol® Aqua SF-1 Polymer** to deionized water. Add sodium laureth sulfate with gentle mixing.
2. Neutralize to pH 6.6 with sodium hydroxide.
3. Add PART B ingredients to the batch in order, while mixing.
4. Pre-combine fragrance and solubilizer and add to batch.
5. Add remaining ingredients with gentle mixing.
6. Adjust pH to 6.5 with sodium hydroxide if necessary.

Product Properties:

Appearance Clear Liquid
pH 6.3 – 6.7
Viscosity, (mPa s)*** 3,000 – 5,000
Yield Value (dyn/cm²) 90 – 150
Turbidity (NTU)**** 6 – 10

Carbopol® Aqua SF-1 Polymer actives, 2.4%
Surfactant Actives, 13.7%

Stability: Passed 3 months @ 45°C, 5 cycles freeze/thaw
***Brookfield RVT @ 20 rpm, 25 °C #4 spindle, measured after 24 hours
****HF Scientific, Inc., Micro 100 Turbidimeter

Supplier References:**Noveon, Inc. (2, 3, 5)**

Nalco (6)

Dow (7)

Clariant Corporation (8)

Intercontinental Fragrance (9)

Protameen (10)

Quantum Colours (11, 12)

Lipo (13)

The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained. The information often is based on laboratory work with small-scale equipment and does not necessarily indicate end product performance or reproducibility. Formulations presented may not have been tested for stability and should be used only as a suggested starting point. Because of the variations in methods, conditions and equipment used commercially in processing these materials, no warranties or guarantees are made as to the suitability of the products for the applications disclosed. Full-scale testing and end product performance are the responsibility of the user. Noveon, Inc. shall not be liable for and the customer assumes all risk and liability for any use or handling of any material beyond Noveon's direct control. **THE SELLER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.** Nothing contained herein is to be considered as permission, recommendation, nor as an inducement to practice any patented invention without permission of the patent owner.

Noveon, Inc. is a wholly owned subsidiary of The Lubrizol Corporation

*Trademark owned by The Lubrizol Corporation

© Copyright 2005 Noveon, Inc.