

Glypure™

Cosmetic-Grade Glycolic Acid

Formulation—Men's Care All-In-One Hair and Body Wash



Glypure™ penetrates the hair shaft—helping hair better withstand heat, as well as softening hair and providing superior lubrication. It also penetrates the skin efficiently—readjusting water percentages in the epidermis, stimulating collagen synthesis, and promoting cell turnover, as well as is an efficient pH adjuster.

- Makes hair significantly less prone to breakage
- Promotes manageability of hair
- Softens hair
- Reduces flaking and drying of the scalp
- Moisturizes the scalp
- Provides moisturizing effect to skin
- Improves the look and feel of skin
- Promotes exfoliation
- Reduces the appearance of fine lines and wrinkles

| Phase | Trade Name | Wt% | INCI Name | Supplier |
|--------|---|------------|--|-------------------------------|
| A1 | Purified Water USP | 40.00 | Purified Water USP | |
| A2 | Bio-Terge® AS-40 CG-P | 17.00 | Sodium C14-16 Olefin Sulfonate | Stepan |
| A3 | Edeta® BD | 0.05 | Disodium EDTA | BASF |
| A4 | Crothix™ PA MH | 1.00 | PEG-150 Pentaerythrityl Tetrastearate | Croda |
| A5 | Mackernium® 007 | 2.00 | Polyquaternium 7 | Solvay |
| A6 | Amphosol® CA | 3.00 | Cocoamidopropyl Betaine | Stepan |
| A7 | Crodasinc® LS30 | 8.00 | Sodium Lauroyl Sarcosinate | Croda |
| A8 | Cetiol® HE | 2.00 | PEG-7 Glyceryl Cocoate | BASF |
| A9 | Ajidew® N-50 | 0.40 | Sodium PCA | Ajinomoto |
| B1 | Purified Water | 15.00 | Purified Water | |
| B2 | Glypure™ | 5.00 | Glycolic Acid (70%) ¹ | Chemours |
| B3 | Triethanolamine 99% | 1.50 | Triethanolamine 99% NF ^{2,3} —to pH 3.5–4.03 | – |
| C1 | Elestab® FL-15 | 2.50 | Butylene Glycol (and) Glycerin (and) Chlorphenesin (and) Methylparaben | Lab. Serobiologiques/ BASF |
| D1 | FD&C Blue #1 | 0.10 | Dye (To Shade Desired) | – |
| D2 | As Desired w/Acidic Top Notes | 0.00 | Fragrance | As Desired |
| Adjust | Adjust final pH to 3.8–4.2 with Triethanolamine or Glypure™, as necessary | | | |
| qs | Purified Water USP | qs to 100% | Purified Water USP | |

Notes:

¹Glypure™ (99%) may be substituted for Glypure™ (70%). Compensate for active Glycolic Acid content and purified water percentage accordingly.

²May use other suitable alkalis, e.g., Potassium Hydroxide, Ammonium Hydroxide, or Sodium Hydroxide.

³Do not exceed 2.5% of Triethanolamine to comply with EU regulations. If necessary, add another neutralizing agent.

In lieu of Glypure™, formulators and manufacturers must use Glypure™ L for products used or distributed in Canada or Australia and in Europe for nail care products.

Manufacturing Procedure

1. In the main vessel, add A1-A3; mix until A3 is soluble.
2. Add A4 and heat to 60-65 °C (140-149 °F) to solubilize A4.
3. With continued mixing, lower temperature to 45-50 °C (113-122 °F) and add A5-A9.
4. In a separate vessel, prepare phase B. When pH is adjusted appropriately, add to phase A.
5. Begin cooling to 30-35 °C (86-95 °F) and add phase C. Mix until clear.
6. Add remaining ingredients, phases D and E, and any adjusted percentage of make-up water.

Glypure™ has proven benefits in hair, skin, and nail care formulations. To learn more about the benefits of Glypure™, visit www.glypure.com.

For more information, visit glycolicacid.chemours.com or call (800) 441-9593.

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