# **Glypure**™

Cosmetic-Grade Glycolic Acid

# Formulation—Skin Care Face Cream with Pro-Vitamin A

**Trade Name** 



Glypure<sup>™</sup> penetrates the skin efficiently—readjusting water percentages in the epidermis, stimulating collagen synthesis, and promoting cell turnover. It is also an efficient pH adjuster.

- Improves the look and feel of skin
- Promotes exfoliation
- Improves skin texture
- Fights the signs of aging
- Reduces the appearance of fine lines and wrinkles
- Improves the appearance of sun-damaged skin
- Helps even out skin tone

A1	Purified Water USP	25.00	Purified Water USP	
A2	Natrosol® 250 HEC	0.20	Hydroxyethylcellulose	Ashland
А3	Zemea® Propanediol	3.00	Propanediol	DuPont Tate & Lyle Bio Products
Α4	Keltrol® CG-T	0.40	Xanthan Gum NF	CP Kelco
A5	Arlasolve™ DMI	1.00	Dimethyl Isosorbide	Croda
A6	Edeta® BD	0.10	Disodium EDTA	BASF
B1	Purified Water USP	20.00	Purified Water USP	
B2	Glypure™	6.70	Glycolic Acid (70%) <sup>1</sup>	Chemours
В3	Triethanolamine 99%	0.75	Triethanolamine 99% NF—to pH 3.8 or desired pH	_
C1	White Protopet® 1S Petrolatum	4.00	White Petrolatum	Sonneborn
C2	Fancor® Meadowfoam Seed Oil	4.00	Meadowfoam Seed Oil	Elementis Specialties
C3	White Beeswax NF	0.50	White Beeswax NF	Strahl & Pitsch
C4	Dermol IPP	3.50	Isopropyl Palmitate	Alzo
C5	Alkest® SP 60 F	1.50	Sorbitan Stearate	Oxiteno
C6	Arlacel™ 165	3.50	Glyceryl Stearate/ PEG-100 Stearate	Croda
<b>C7</b>	Xiameter® PMX-200 Silicone Fluid 100CS	2.00	Dimethicone	Dow Corning
C8	Wickenol® 171	3.50	Octyl Hydroxystearate	Alzo
C9	Vitamin E Acetate	1.00	Tocopherol Acetate USP	DSM
C10	ВНТ	0.01	BHT (Butylated Hydroxytoluene)	Merisol Antioxidants, LLC
C11	Crodacol™ CS50	1.50	Cetearyl Alcohol	Croda
C12	Propylparaben	0.10	Propylparaben	Spectrum Chemical
D1	Zemea® Propanediol	2.00	Propanediol	DuPont Tate & Lyle Bio Products
D2	Phenoxetol®	0.30	Phenoxyethanol	Clariant
D3	Methylparaben	0.30	Methylparaben, NF	Spectrum Chemical
D4	Elestab® CPN	0.30	Chlorphenesin	Lab. Serobiologiques/BASF
E1	Vitamin A Palmitate	0.45	Vitamin A	DSM
F1	As Desired	0.00	Fragrance	As Desired
qs	Purified Water USP <sup>4</sup>	qs to 100%	Purified Water USP	

Wt%

**INCI Name** 

Supplier

#### Notes:

<sup>1</sup>Glypure™ (99%) may be substituted for Glypure™ (70%). Compensate the purified water percentage accordingly.

<sup>2</sup>Compensate the purified water percentage accordingly for any additives.

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 and sprinkle in A2. Mix for 30 min to hydrate.
- 2. In a separate vessel, pre-wet A3 and A4 until a uniform slurry is formed. Add to phase A.
- Add A5 and A6 separately with continued mixing.
- 4. In a separate vessel, prepare phase B and add to phase A.
- 5. Begin heating phase AB to 70-75 °C (158-167 °F).
- 6. In a separate vessel, add the ingredients of phase C and begin heating to 70-75 °C (158-167 °F).
- 7. When both phase AB and phase C are at 70-75 °C (158-167 °F), add phase C to phase AB. Mix and homogenize for 15 min.
- 8. Cool to 65 °C (149 °F) and add phase D that has been pre-mixed and solubilized in a separate vessel.
- 9. Continue cooling to 45 °C (113 °F) with mixing.
- 10. At 45 °C (113 °F), add phase E to phase ABCD. Continue mixing and cooling to 35 °C (95 °F).
- 11. At 35 °C (95 °F), add fragrance and purified water to compensate for any water losses.

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

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

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