

# Glypure™

## Cosmetic-Grade Glycolic Acid

### Formulation—Hair Care Leave-In Conditioner



Glypure™ leave-in conditioner formula contains glycolic acid that has been shown to penetrate the hair shaft, making hair significantly less prone to breakage, as well as providing superior lubrication that makes hair easier to manage.

- Makes hair significantly less prone to breakage
- Promotes manageability of hair
- Moisturizes hair and scalp
- Reduces flaking and drying of the scalp

Phase	Trade Name	Wt%	INCI Name	Supplier
A1	Purified Water	60.00	Purified Water	
A2	Edeta® BD	0.05	Disodium EDTA	BASF
A3	Ucare™ Polymer JR-30M	0.10	Polyquaternium-10	Dow
A4	Glycerin USP	0.30	Glycerin	Vantage Specialty Ingredients, Spectrum
A5	Dehyquart® L 80	2.50	Dicocoethyl Hydroxyethylmonium Methosulfate (and) Propylene Glycol	BASF
A6	DL-Panthenol	0.10	Panthenol	Protameen
B1	Purified Water	27.00	Purified Water	
B2	Glypure™	1.00	Glycolic Acid (70%) <sup>1</sup>	Chemours
B3	Trolamine 99	0.20	Triethanolamine 99% NF <sup>2,3</sup> to pH 3.5–4.0 <sup>3</sup>	Dow, Vantage Specialty Ingredients
C1	Elestab® FL-15	2.50	Butylene Glycol (and) Glycerin (and) Chlorphenesin (and) Methylparaben	Lab. Serobiologiques/ BASF
C2	XIAMETER® OFX-0193 Fluid	1.00	PEG-12 Dimethicone	Dow Corning
C3	Gluadin® AGP	0.25	Hydrolyzed Wheat Protein	BASF
D1	To Shade Desired	0.00	Dye	
D2	As Desired	0.00	Botanical Extracts <sup>4</sup>	
D3	As Desired w/Acidic Top Notes	0.00	Fragrance	
Adjust	Adjust final pH to 3.8–4.2 with Triethanolamine or Glypure™, as necessary			
qs	Purified Water	qs to 100%	Purified Water	

#### Notes:

<sup>1</sup>Glypure™ (99%) may be substituted for Glypure™ (70%). Compensate for active Glycolic Acid Content and Purified Water percentage accordingly.

<sup>2</sup>May use other suitable alkalis, e.g., Potassium Hydroxide, Ammonium Hydroxide, or Sodium Hydroxide.

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

<sup>4</sup>Botanical extracts should be acidic in nature or non-reactive to low pH.

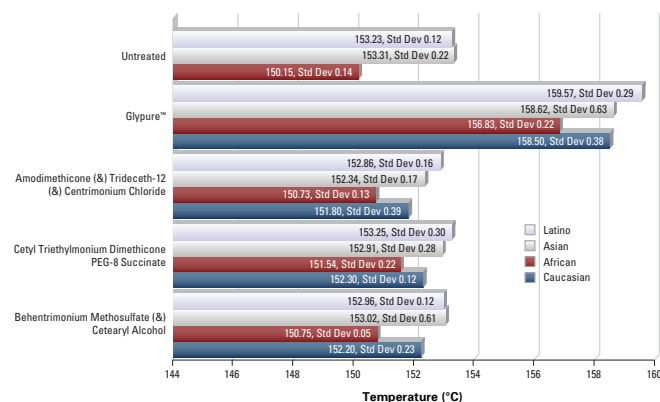
## Manufacturing Procedure

1. To the main vessel, add A1. Begin mixing.
2. Add A2, and mix until completely soluble and water clear.
3. Slowly add A3 to minimize agglomeration, and heat to 35–50 °C (95–122 °F) until completely clear.
4. Cool to 30–35 °C (86–95 °F), and add A4, A5, and A6. Mix until uniform.
5. In a separate vessel, add B1-B3 in order, and mix until pH is constant. Adjust pH, if necessary, with Glypure™ or Triethanolamine. Add to main vessel.
6. Add in order, C1, C2, and C3, with continued mixing until uniform.
7. Add D1, D2, and D3, if desired.
8. Adjust batch to indicated pH and qs to 100% with Purified Water.

Glypure™ has proven benefits in hair, skin, and nail care formulations. To learn more about the benefits of Glypure™, visit [www.glypure.com](http://www.glypure.com).

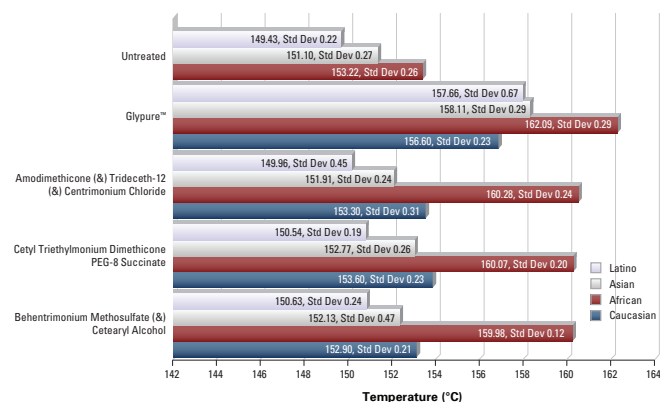
## DSC - Healthy Hair

Glycolic Acid Penetrates the Hair Shaft and Interacts with Keratin to Increase the Denaturation Temperature



## DSC - Chemically Damaged Hair

Glycolic Acid Penetrates the Hair Shaft and Interacts with Keratin to Increase the Denaturation Temperature



For more information, visit [glycolicacid.chemours.com](http://glycolicacid.chemours.com) or call (800) 441-9593.

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