

# Premium Ingredients for Superior and Safe Cosmetics



## **GLYCOS® Clear** Premium grade Glycolic Acid for superior skin- and haircare products

Glycolic Acid is considered the golden standard Alpha Hydroxy Acid (AHA) for antiaging cosmetics and for the treatment of superficial skin conditions. This fruit acid is a water-soluble ingredient that acts as a gentle, chemical exfoliant by promoting natural, surface-level cell loss and by increasing the turnover rate of new skin cell growth. Glycolic Acid shows excellent effects like the improvement of collagen synthesis, increased levels of hyaluronic acid, and an enhanced quality of the skin's elastic fiber. In hair care applications, Glycolic Acid demonstrated excellent effects by its ability to penetrate the cuticle layer of the hair shaft and directly react with keratin, which helps repair crosslinks between  $\alpha$ -keratin cross slices.

### **Proprietary synthesis for safe cosmetic ingredients**

The production of Glycolic Acid can be done by several synthesis routes based on different starting materials. Most common is the carbonylation of formaldehyde, which is known to develop the undesirable by-product Methoxyacetic Acid (MAA), a toxic metabolite which has been banned by the European Commission by means of EC1223/2009.

Consequently, proprietary processes are increasingly important for providing premium-grade Glycolic Acid to satisfy the safety concerns of cosmetics manufacturers and end-users alike.

## **Your benefits with GLYCOS® Clear**

- Without Methoxyacetic Acid ( $C_3H_6O_3$ )
- Without nanomaterials, sulfates, solvents, preservatives or antioxidants
- Contains <0.1% (w/w) NaCl
- Very low colour, max. Hazen 20
- Low Acetic Acid content (odour)
- ISO 9001, ISO 14001 and ISO 50001 certification
- Complies with EC 1223/2009 (Cosmetics Regulation)
- CABB is the only European producer of premium-grade Glycolic Acid

For our GLYCOS® Clear premium-grade Glycolic Acid, we have explored a proprietary synthesis route that limits and even eliminates impurities of concern. GLYCOS® Clear is readily biodegradable, exempt from VOCs, non-flammable, REACH-registered, and MAA-free.

CABB Glycolic Acid is manufactured at our German plant with state-of-the-art technologies. We guarantee a pure and safe product with absolute consistency, quality and reliability.

## Delivery specifications

Product: Glycos® Clear 70 (Hydroxyacetic Acid)

Formula: HOCH<sub>2</sub>COOH

Molecular weight: 76.1 g/mol

CAS No.: 79-14-1

UN No.: 3265

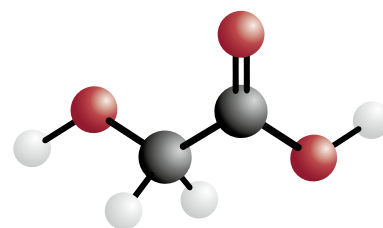
EINECS No.: 201-180-5

Country of origin: Germany

Shelf life: 3 years

Packaging units: 25 kg PE canister;

70 kg PE drum; 250 kg PE drum



Quality characteristic	Unit	Target value	Method	Certificate <sup>1</sup>
Appearance	-	clear liquid, free from foreign matter	visual	
Identification	-	-	-	
Total acid as Glycolic Acid	%(w/w)	70.0 - 72.0	acid/base titration	yes
Free Glycolic Acid	%(w/w)	63.0 - 66.0	acid/base titration	yes
Methoxyacetic Acid		<b>not present</b>		
Sodium Chloride	%(w/w)	max. 0.1	argentometrically	yes
Formic Acid	mg/kg	max. 20	gas chromatography	yes
Acetic Acid	mg/kg	max. 100	gas chromatography	yes
Formaldehyde	mg/kg	max. 8	photometry	yes
Iron (as Fe)	mg/kg	max. 5	photometry	yes
Heavy metals (as Pb)	mg/kg	max. 4	turbidimetry	yes
Pt/Co scale (Hazen, APHA)	-	max. 20	photometry	yes

<sup>1</sup> Quality characteristics marked with "yes" are referred to in the certificate of analysis.

**CABB has more than 40 years of experience with Glycolic Acid, and we constantly improve our products and processes to achieve the highest quality and safety standards.**

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