

## Ascorbyl Glucoside

### Description

Ascorbyl Glucoside is a stabilized Ascorbic Acid derivative with superior formulation stability; it is easily soluble in water.

It resists discoloration and degradation, while retaining all the biologic activity of L-ascorbic acid.

Ascorbyl Glucoside has the same lightening, sun protective and anti-aging properties as L-ascorbic acid. It penetrates into the skin where it is metabolized to free vitamin C.

### Appearance

white to cream white powder

### INCI

Ascorbyl Glucoside

### Registration

CAS-No.....129499-78-1

EINECS-No.....425-980-0

Raw material approved by ECOCERT GREENLIFE, conform to the COSMOS Standard.

### Preservatives / Stabilizers

none

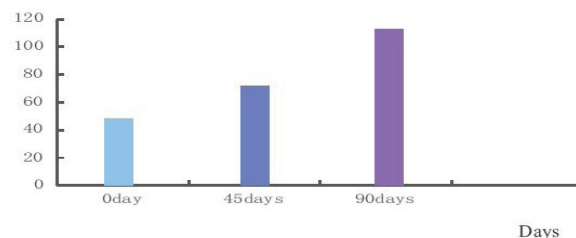
### Efficacy

- excellent antioxidant
- boosts collagen production
- lightening & brightening
- reduces fine lines and wrinkles
- repairs and protects from sun damage



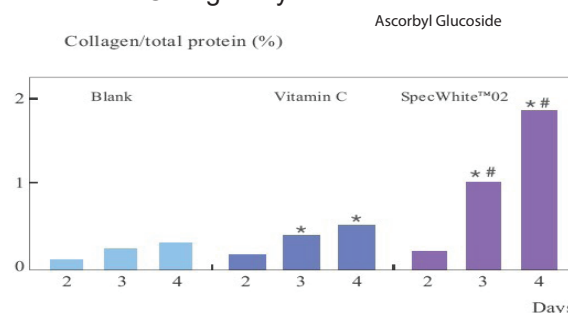
COSMOS APPROVED

#### Skin Lightening



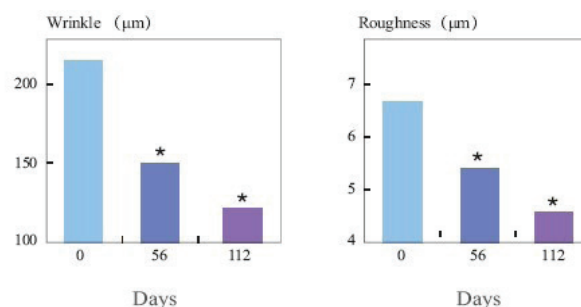
Sixteen female volunteers (37 to 55 years old) applied a face cream containing 2 % of Ascorbyl Glucoside, twice a day.

#### Promotion of Collagen Synthese



(\*Significantly different from control at <0.05 and #significantly different from vitamin C at <0.05)

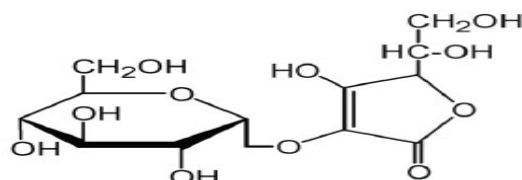
#### Wrinkle Reduction / Skin Roughness



Sixteen female volunteers (37 to 55 years old) applied a face cream containing 2 % of Ascorbyl Glucoside, twice a day for a total of 112 days to the outer corners of their eyes and cheek area.

## Ascorbyl Glucoside

### Chemical structure



Glucose                      Vitamin C

Molecular formel:  $C_{12}H_{18}O_{11}$   
Molecular Weight: 338.26472

### Characteristics

pH-value.....2.0 - 2.5  
melting point.....158°C - 163°C  
optical rotation.....+186.0° - +188.0°  
assay.....>=98 %

### Application

Ascorbyl Glucoside can be incorporated in different kinds of cosmetic formulations.

### Application concentration

skin care creams.....0.1 - 2.0 %  
anti wrinkle treatment.....1.0 - 2.0 %  
skin lightening products.....1.0 - 2.0 %

### Incorporation

Ascorbyl Glucoside is highly stable at pH 5 - 7 even at high temperatures (up to 100 °C).  
Please avoid leaving it under prolonged conditions of strong acidity or alkalinity (pH 2 - 4 and 9 - 12).  
For better stability and to avoid pH drift the use of 1 % citrate buffer is recommended.  
To avoid discoloration protect the formulation from light, heat and high temperatures and adjust pH to

6.5 to 6.8. The addition of metal chelating agent and/or an antioxidant improves stability.

### Toxicology

Skin irritation: not irritant  
Eye irritation: not irritant  
Skin sensitization: not sensitizing  
Acute Toxicity: > 2,000 mg/kg  
(by oral administration)  
> 2,000 mg/kg  
(by dermal administration)  
Subacute Toxicity: NOAEL > 1,000 mg/kg  
(28-day oral administration to rat)

### Storage & Shelf life

Shelf life is 24 months. Store in sealed containers in a cool and dry place. Protect from light and moisture.

Selco Wirkstoffe Vertriebs GmbH

Straßburg 16  
69483 Wald-Michelbach / Germany  
Telefon +49 6207 922 80  
Telefax +49 6207 922 810  
www.gfn-selco.de  
info@gfn-selco.de

Leaflet\_7268\_e  
19.03.2018