

# CLA GLUTATHIONE

## >> STABILIZED GLUTATHIONE FOR SKIN DETOXIFYCATION

### ANTI-POLLUTION AND “ANTI-INFLAMMAGING” COMPLEX FOR SKIN PURIFICATION

**CLA Glutathione** is a skin detoxifying active based on an exclusive lipo-tripeptide made of condensed **conjugated linoleic acid (CLA)** and **glutathione (GSH)**.

Compared to most of the market products, glutathione is stabilized through a specific technology where the functionalization with CLA protects its active thiol, preserving GSH anti-oxidant action and overall stability through a smart steric hindering given by CLA long and flexible fatty chain.

**CLA Glutathione displays an innovative in vivo mechanism** aimed to:

- counteract skin inflammations and oxidative stress
- **promote the formation of anti-inflammatory prostaglandin (PGE2)**
- **increase the endogenous production of Glutathione**, to increase skin protection against pollutants and promote its purification.

## >> POSITIONING

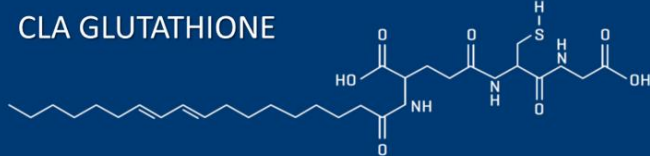
### FUNCTIONAL AND TECHNOLOGY HIGHLIGHTS

- **Stabilized glutathione complex through the innovative “wrap” technology**
- **Skin detoxifying**
- **“Anti-inflammaging” and soothing action through in vivo activated reaction**
- **Anti-pollution**
- Skin revitalizing after UV exposure
- Skin softness and emolliency
- Ideal for skin care, hair care, make up and toiletries applications



### GLUTATHIONE STABILIZATION

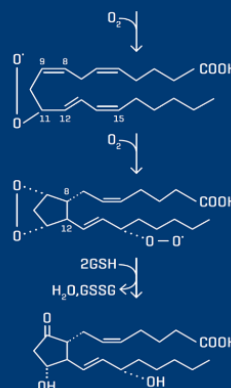
#### CLA GLUTATHIONE



[ WRAP TECHNOLOGY ]

GSH is stabilized through the condensation with CLA long and flexible fatty chain, that wraps and hinders GSH functional site.

### ANTI-INFLAMMATORY MECHANISM



[ PROSTAGLANDIN E2 ]  
(PGE2)

After the skin application, CLA is converted through a multi-step reaction in PGE2, molecule with anti-inflammaging action

### CLA BENEFICIAL EFFECTS SUMMARY

- Precursor of the anti-inflammatory PGE2; increases endogenous GSH production.
- Increases the delivery of GSH and oligopeptides linked to it (permeation enhancer).
- Stabilizes GSH by "wrapping" action promoted by its flexible long chain (steric hindering).
- Stable to oxidation in cosmetics formulations.

CLA and GSH show a unique biological synergistic action. Above the key aspects related to CLA features that maximize GSH activity

### GLUTATHIONE BENEFICIAL EFFECT SUMMARY

- Free radical scavenger.
- Activates the bio-conversion of CLA to PGE2 (as reducing co-factor).
- Plays an essential role in the elimination of toxic substances (eg. pollutants).

CLA and GSH show a unique biological synergistic action. Above the key aspects related to GSH features that maximize CLA activity

## >> TECHNICAL OVERVIEW

PH OF USE	% OF USE	APPLICATIONS	SOURCING	FORMULATION TIPS
5.5 ÷ 8.0	1.0 ÷ 5.0	Skin care emulsions, gels and lotions; toiletries, make up and hair/eye lashes care products	Vegetable/ biotechnology	Add in cold process

[ INCI NAME : potassium glutathione isomerized linoleate, aqua ]



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