



Elix-CARE PDO

INCI Propanediol
CAS 504-63-2

SPECIFICATIONS

Aspect Colorless liquid
Colorless liquid 10 max
Water content 0,1% max

REGULATORY

ECOCERT/COSMOS approved
RSPO Registered
Natural Index 1
(according to ISO 16128)

GENERAL INFORMATION

Elix-CARE PDO is a high purity ingredient produced from 100% renewable, GMO-free sources. It can be used as a solvent, emollient, humectant and/or antimicrobial agent as well as a carrier for actives in cosmetics and personal care products.

FORMULATION & RECOMMENDATIONS

Elix-CARE PDO is made from natural Glycerol and is an excellent natural alternative to petroleum-based Glycols such as Propylene Glycol, Butylene Glycol or Methyl-Propanediol. Pure Elix-CARE PDO has a pH near 7. Even at a concentration higher than 70% no skin irritation or sensitization occurs.

Compared to standard Glycols, Elix-CARE PDO gives better performance both in skin moisturization (no tackiness and filming, soft feeling) and hair moisturization (higher water absorption, increased smoothness and softness).

Elix-CARE PDO has a synergistic effect in combination with Glycerin, giving a long-lasting moisturizing effect.

Actives such as Allantoin, Glycolic Acid and various other antioxidants show a high solubility in Elix-CARE PDO and better performance compared to water-based solutions.

Its polar character mediated by the two hydroxy substituents causes the unlimited solubility in water.

Dosage level

Recommended concentration

2-10% (as a booster)

Solubility

completely soluble in water at all proportions

We suggest adding the recommended concentration at the water phase of your formulation.

BENEFITS

- Produced from 100% renewable sources
- GMO-free
- Excellent booster for preservative system
- Improve moisturizing efficiency
- Non skin sensitizing or irritating
- Excellent sensory profile.

APPLICATIONS

Fragrances
Pharmaceuticals
Natural extracts

Cosmetics

- Skin Care
- Oral care
- Make up
- Hair Care
- Toiletries
- Sun Care
- Baby care

SHELF LIFE

24 months under proper storage conditions

EFFICACY

Elix-CARE PDO is not considered to be a preservative itself but can act as a preservative booster in many preservative systems. The pure product shows antibacterial activity as shown below

Bacteria	Conc. (CFU/ml)	Antibacterial rate (%)	Evaluation
Staphylococcus aureus	6.9 x 10 ⁵	94.2	Significant
Escherichia coli	7.8 x 10 ⁵	>99.9	Significant

Hygienic standard for disposable sanitary product GB 15979-2002

Elix-CARE PDO is an efficient booster, especially in Phenoxyethanol and Benzyl Alcohol based formulations against bacteria (both gram positive and negative) and yeasts. The use of Elix-CARE PDO can significantly reduce the amount of preservatives required in the formulation.

