

## TECHNICAL DATA SHEET

## Elix-CARE PDO

INCI Propanediol

CAS 504-63-2



## SPECIFICATIONS

Appearance	Colorless liquid
Color (APHA)	10 max.
Water content (%)	0.1 max

## 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 AND RECOMMENDATIONS

Elix-CARE PDO 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.

**Recommended use concentration**

2-10% (as a preservative booster)

**Solubility**

completely soluble in water at all proportions

## 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

**Test Method**

Bacteria	Concentration (CFU/ml)	Antibacterial rate (%)	Evaluation
Staphylococcus aureus	$6.9 \times 10^5$	94.2	Significant
Escherichia coli	$7.8 \times 10^5$	>99.9	Significant

*Hygienic standard for disposable sanitary product GB 15979-2002*

## 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
- Hair Care
- Sun Care
- Oral care
- Toiletries
- Baby care
- Makeup

## REGULATORY

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

## SHELF LIFE

24 months under proper storage conditions