



## Elix-KON CHP

INCI Chlorphenesin  
CAS 104-29-0

### SPECIFICATIONS

Appearance White or pale cream-colored crystals  
Assay (%) Min. 99.0

### GENERAL INFORMATION

Elix-KON CHP, Chlorphenesin, is a broad spectrum preservative ingredient, active against bacteria, fungi and yeasts.

It is used as a polyvalent preservative in many different cosmetic products. Elix-KON CHP can be used to overcome formulation issues such as viscosity and pH changes, emulsion breakdowns, visible microorganism growth, color changes and unpleasant odor formations.

Elix-KON CHP, Chlorphenesin, is glycerol in which the hydrogen of one of the primary hydroxy groups is substituted by a 4-chlorophenyl group. It has antifungal and antibacterial properties and is used for treatment of cutaneous infections.

### FORMULATION & RECOMMENDATION

Elix-KON CHP, Chlorphenesin, is soluble in hot water at 65 – 70 °C by stirring, almost insoluble in oils and fats. To enhance solubility, a premix is suggested prior to addition (15 – 20 % concentration) in glycols such as Elix-CARE PDO (1,3-propanediol).

Elix-KON CHP, Chlorphenesin, shows a very good stability in formulations within the pH range of 3.5 – 6.5. Examples of good results even at higher pH values (such as pH 9) can be found in the literature.

**Recommended use concentration**  
0.1 – 0.3 % (as a preservative)

**Solubility**  
Water, insoluble in oils and fats

### EFFICACY

Below is an overview showing the Minimum Inhibitory Concentration (MIC) of Elix-KON CHP:

Microorganism	MIC
<b>Gram-negative bacteria</b>	
Escherichia coli	0.05%
Klebsiella aerogenes	0.05%
Klebsiella pneumoniae	0.05%
Proteus vulgaris	0.05%
Salmonella typhimurium	0.05%
<b>Gram-positive bacteria</b>	
Staphylococcus aureus	0.30%
Streptococcus lactis	0.15%
Corynebacterium xerosis	0.15%
<b>Fungi</b>	
Aspergillus Brasiliensis	0.15%
Penicillium Pinophilum	0.15%
<b>Yeast</b>	
Candida albicans	0.30%
Saccharomyces cerevisiae	0.30%

### APPLICATIONS

**Fragrances**  
**Pharmaceuticals**  
**Natural extracts**

#### Cosmetics

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

### BENEFITS

- Polyvalent and globally accepted preservative active
- Formaldehyde free
- It does not enhance fat oxidation
- It does not denature proteins

### SHELF LIFE

Under proper storage conditions the shelf life is 48 months