



# Elix-KON DHA

INCI Dehydroacetic acid  
CAS 520-45-6

## SPECIFICATIONS

Appearance Crystalline powder  
Odor Odorless  
Assay (%) Min. 99.0

## GENERAL INFORMATION

Elix-KON DHA, is a preservative active ingredient widely used in cosmetic and toiletries formulations.

Elix-KON DHA is highly effective against fungi and yeasts and offers a stronger efficacy compared to many other traditional preservatives.

Elix-KON DHA is an odorless, colorless to white crystalline powder, almost insoluble in water and moderately soluble in most organic solvents.

The efficacy of Elix-KON DHA, depends on the pH value of the cosmetic formulations (pH max. 6). The efficiency is increased by reducing the pH value. Only the free organic acid form has a preservative activity.

## FORMULATION & RECOMMENDATIONS

Elix-KON DHA, can be added at room or elevated temperatures and at any time during the manufacturing process. Additionally, it is compatible in all types of formulations: anionic, non-ionic, and cationic.

**Recommended use concentration**  
0.1 – 0.6 % (as preservative active)

**Solubility**  
low solubility in water, soluble in a wide range of other solvents

## BENEFITS

- Can be used for ECOCERT/COSMOS formulations
- Easy to handle
- Good efficacy against molds and bacteria
- Stable and effective over a wide pH range (but max. 6) compared to other acids

## EFFICACY

Elix-KON DHA is highly effective against fungi and yeasts, offers higher antifungal efficacy than many other traditional preservatives.

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

Microorganism	MIC
<b>Gram-negative bacteria</b>	
Escherichia coli	1.00 %
Pseudomonas aeruginosa	2.00 %
<b>Gram-positive bacteria</b>	
Staphylococcus aureus	1.00 %
Streptococcus lactis	1.00 %
<b>Fungi</b>	
Aspergillus brasiliensis	0.02 %
Penicillium notatum	0.02 %
<b>Yeast</b>	
Candida albicans	0.02 %
Saccharomyces cerevisiae	0.02 %

## APPLICATIONS

### Cosmetics

- Skin care
- Hair care
- Oral care
- Facial masks
- Sun care
- Baby care
- Wet wipes
- Make up
- Toiletries

## REGULATORY

ECOCERT/COSMOS Allowed  
NATRUE Allowed

## SHELF LIFE

Under proper storage conditions the shelf life is 12 months