

UNIPHEN P-23

PRESERVATIVE FOR COSMETICS AND OTHER EXTERNALS

Composition	Uniphen P-23 is a combination of different esters of 4-hydroxybenzoic acid, dissolved in 2-phenoxyethanol. Total content of 4-hydroxybenzoic acid esters is 26%												
Uniphen P-23	contains 5 different parabens, including Isobutylparaben												
Appearance	Clear, colorless to yellowish, slightly viscous liquid; faint aromatic odor.												
Analytical data	See specifications.												
Solubility	Soluble in ethanol, aqueous ethanol, glycols, polyethylene glycols, moderately soluble in water (0.5%)												
Properties	Uniphen P-23 shows a strong bacteriostatic efficacy against numerous microorganisms, e.g. <table> <tr> <td>Staphylococcus aureus</td> <td>Escherichia coli</td> </tr> <tr> <td>Pseudomonas fluorescens</td> <td>Pseudomonas aeruginosa</td> </tr> <tr> <td>Saccharomyces cerevisiae</td> <td>Penicillium crustaceum</td> </tr> <tr> <td>Candida albicans</td> <td>Aspergillus brasiliensis</td> </tr> </table>	Staphylococcus aureus	Escherichia coli	Pseudomonas fluorescens	Pseudomonas aeruginosa	Saccharomyces cerevisiae	Penicillium crustaceum	Candida albicans	Aspergillus brasiliensis				
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Pseudomonas fluorescens	Pseudomonas aeruginosa												
Saccharomyces cerevisiae	Penicillium crustaceum												
Candida albicans	Aspergillus brasiliensis												
Use	As a preservative for all kind of cosmetic products; especially for emulsions, but also for gels, surfactant products, and other types. For emulsions, the addition after the emulsifying process is recommended, at temp. below 50°C (120°F).												
Efficacy	The following MIC values were found: <table> <thead> <tr> <th>Organism</th> <th>% Uniphen P-23</th> </tr> </thead> <tbody> <tr> <td>Pseudomonas aeruginosa</td> <td>0.23</td> </tr> <tr> <td>Escherichia coli</td> <td>0.20</td> </tr> <tr> <td>Staphylococcus aureus</td> <td>0.20</td> </tr> <tr> <td>Candida albicans</td> <td>0.15</td> </tr> <tr> <td>Aspergillus niger</td> <td>0.13</td> </tr> </tbody> </table>	Organism	% Uniphen P-23	Pseudomonas aeruginosa	0.23	Escherichia coli	0.20	Staphylococcus aureus	0.20	Candida albicans	0.15	Aspergillus niger	0.13
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Aspergillus niger	0.13												
Dosage	0.3 - 1.3%. Maximum allowed concentration in a finished product within the EU is 1.3%.												
Storage	5°C - 25°C (see safety data sheet)												
Shelf life	2 years (see specification)												
Identification													

INCI Monograph ID	INCI Name	Chinese Name	CAS No.
2290	Phenoxyethanol	苯氧乙醇	122-99-6
1624	Methylparaben	羟苯甲酯钾	99-76-3
1011	Ethylparaben	羟苯乙酯	120-47-8
352	Butylparaben	羟苯丁酯	94-26-8
2642	Propylparaben	羟苯丙酯	94-13-3
1298	Isobutylparaben	羟苯异丁酯	4247-02-3

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Regulatory status:

EU:	Isobutylparaben not listed as approved preservatives in preparation
USA	approved preservative up to 1.3%
China	approved preservative up to 1.3%
Japan	Phenoxyethanol approved preservative, parabens: quasi drugs
other countries:	approved preservatives up to 1.3% usually

Product properties: Please see Technical Data Sheet (TDS)
and Specification (SPE).

INCI Name: Phenoxyethanol Status: allowed
EU Reference #: 29 EU Name: 2-Phenoxyethanol
Maximum Authorized Concentration: 1.0%
Limitations and Requirements: None
Conditions of use and warnings which must be printed on the label: None

INCI Name:
Methylparaben, Ethylparaben, Propylparaben, Butylparaben, Isobutylparaben
EU Reference #: 12 EU Name: 4-Hydroxybenzoic acid and its salts and esters
Status: allowed
Maximum Authorized Concentration:
0.4% (acid) for 1 ester; 0.8% (acid) for mixture of esters
Limitations and Requirements: None
Conditions of use and warnings which must be printed on the label: None

Other regulations:

Phenoxyethanol: USA: TSCA, CIR; Japan: JCLS, JSCI, JSQI
Parabens: USA: TSCA, CIR; Japan: JCLS, JSCI

References Lucas, J.E. and Mac Carthy, T.J. *Acta pharm. suec.* **7**, 149-155
(1970).

Our indications and recommendations have been worked out to the best of our knowledge and conscience, but without any obligation from our part. In particular, we do not take any responsibility concerning protection rights of a third party.