

# UNIGERM G-2

## PRESERVATIVE FOR COSMETICS

**Composition** Unigerm G-2 is a synergistic preservative complex, consisting of diazolidinyl urea and parabens, dissolved in propylene glycol, with following composition:

Diazolidinyl Urea:	30%
Methylparaben:	11%
Propylparaben:	3%
Propylene Glycol:	56%

### Identification

INCI Monograph ID	INCI Name	Chinese Name	CAS No.
2621	Propylene Glycol	丙二醇	57-55-6
3516	Diazolidinyl Urea	双(羟甲基)咪唑烷基脲	78491-02-8
1624	Methylparaben	羟苯甲酯钾	99-76-3
2642	Propylparaben	羟苯丙酯	94-13-3

**Appearance** Clear, colourless and slightly viscous liquid.

**Analytical data** See specifications.

**Solubility** Soluble in aqueous ethanol as well as in pure and aqueous propylene glycol; soluble in water up to 1%; insoluble in lipids

**Properties** Unigerm G-2 is a synergistic preservative system, distinguished by an exceptional broad spectrum of activity.

Because of its well balanced composition, Unigerm G-2 shows solubility in water of up to 1%.

Unigerm G-2 is compatible with virtually all kinds of ingredients used in cosmetics and is active within an unusually broad pH-range.

Unigerm G-2 consists exclusively of microbiologically active components which have been tested toxicologically and dermatologically and found harmless.

Unigerm G-2 has been dermatologically tested and is tolerated by the skin without problems.

**Use** As a preservative for all kinds of cosmetic products. Because of its exceptional broad range of activity it can be used singly and does not need to be combined with any other preservatives.

**Dosage** 0.5 - 1.6%  
Maximum allowed concentration in a finished product within the EU is 1.6%.

**Storage** 5°C - 25°C (see safety data sheet)

**Shelf life** 2 years (see specification)

# UNIGERM G-2

**Processing** Unigerm G-2 is relatively stable and can easily be processed under conditions common in the production of cosmetics.

**References** Berke, P.A. *et al. Cosmet. & Toil.* **97**, 11, 89 (1982).

## EU Annex VI, Part 1

### PRESERVATIVE WHICH COSMETIC PRODUCTS MAY CONTAIN.

Updated through the Commission Directive 2007/22/EC of April 17, 2007

Review and edits of EU Annex VI were completed on February 4, 2009.

**INCI Name: Diazolidinyl Urea** Status: allowed

EU Reference #: 46

EU Name: N-(Hydroxymethyl)-N-(dihydroxymethyl-1,3-dioxo-2,5-imidazolidinyl-4)-  
N'-(hydroxymethyl)urea

Maximum Authorized Concentration: 0.5%

Limitations and Requirements: None

#### Conditions Of Use And Warnings Which Must Be Printed On The Label:

All finished products containing formaldehyde or substances in ANNEX VI which release formaldehyde must be labeled with the warning "**contains formaldehyde**" where the concentration of formaldehyde in the finished product exceeds 0.05%.

**INCI Name: Methylparaben, Propylparaben,**

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

**Unigerm G-2** can be used in cosmetic products up to 1.6% for the provided application.

---

The information contained herein is based on the present state of our knowledge and does not therefore guarantee certain properties. It is the responsibility of the user to comply with all applicable laws and regulations. *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.*