Cosphatec

TECHNICAL DATASHEET

Cosphagard® Precare

1.1 General information

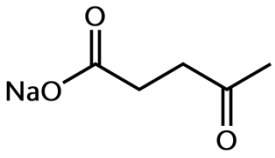
Trade name:	Cosphagard® Precare
Item no.:	03-003-xxxx
Supplier:	Cosphatec GmbH Hopfenmarkt 33 20457 Hamburg Germany
Chemical name:	Aqua, Sodium 4-oxovalerate, Sodium Benzoate
INCI name:	Aqua, Sodium Levulinate, Sodium Benzoate
CAS No.:	7732-18-5, 19856-23-6, 532-32-1
EINECS/ EC No.:	231-791-2, 243-378-4, 208-534-8
IECIC:	Aqua, Sodium Levulinate, Sodium Benzoate

1.2 Product composition

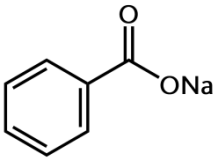
INCI name	CAS No.	%
Aqua	7732-18-5	> 50
Sodium Levulinate	19856-23-6	25-50
Sodium Benzoate	532-32-1	10-25

1.3 Chemical structure

Sodium Levulinate



Sodium Benzoate



1.4 Product short description

Cosphagard® Precare is a mixture of the listed preservative Sodium Benzoate and the naturally derived multifunctional Sodium Levulinate. The blend can be used to replace controversially discussed preservatives like Parabens, MIT, Triclosan, Formaldehyde separators etc. without losing strong antimicrobial efficiencies against bacteria, yeasts and moulds.

A further advantage is that this blend is ECOCERT and COSMOS conform and also complies with further international certification labels.

Based on the European cosmetic regulation the maximum allowed dosage of Cosphagard® Precare for rinse-off products is 22.5 %, for oral products 15.3 % and for leave-on products 4.5 %. Cosphagard® Precare is typically used in applications like cream lotions, shampoos, shower gels, hair conditioners, antiperspirants and decorative cosmetics. In emulsion it might be suitable to boost the antimicrobial efficiency with Cosphaderm® GMCY. For a full efficiency the pH value of the final product should be max 6.0.

1.5 Application

Recommended concentration:	4.5 % (single use as alternative preservative)
Conditions:	water soluble
Hints:	Method 1: add recommended concentration to the water phase of your formulation
	Method 2: add recommended concentration to the final formulation.
	Reduce the pH value at the end of your formulation to pH max 6.0.

2.1 Specified data analyzed per batch

Appearance:	clear, slightly yellow liquid (visual)
Refractive index:	1.412 – 1.420 (refractometric)

Density:	1.16 – 1.21 (pycnometric)
pH:	7.0 – 8.0 (pH-meter)

3.1 Physical and chemical properties

Molecular formula:	H_2O (Aqua), $C_5H_7NaO_3$ (Sodium Levulinate), $C_7H_5NaO_2$ (Sodium Benzoate)
Molecular weight:	18.02 g/mol (Aqua), 138.1 g/mol (Sodium Levulinate), 144.10 g/mol (Sodium Benzoate)
Appearance:	clear, slightly yellow liquid
Odour:	characteristic
Solubility:	unlimited water soluble

3.2 Packing and Storage conditions

Packing sizes:	25 kg cans (HDPE inner coating) and 180 kg drums (HDPE inner coating)
Storage conditions:	The product should be stored in the air-tight original sealed container protected from direct sunlight, moisture and heat.
Shelf life:	At least 12 months if unopened and stored under proper conditions

4.1 Regulatory compliance

Sodium Levulinate (CAS: 19856-23-6) is included/listed in the following international inventories:

DSL (Canada); TCSI (Taiwan); NZioC (New Zealand); IECSC (China).

Sodium Benzoate (CAS: 532-32-1) is included/listed in the following international inventories:

EINECS (Europe); TCSI (Taiwan); ENCS (Japan); TSCA (USA); DSL (Canada); KECI (Korea); AICS (Australia); PICCS (Philippines); NZIoC (New Zealand)

4.2 Regulatory status for cosmetic application

Product complies with Regulation (EU) No. 1223/2009 in all the defined requirements.

4.3 Additives

Product contains only the specified ingredients. No other substances like preservatives, antioxidants, fragrances, colorants or other are added.

4.4 Impurities

	Not expected*	Present#	ppm
BSE/TSE	☒	☐	
Dioxin	☒	☐	
Formaldehyde	☒	☐	
Gluten	☒	☐	
Lactose	☒	☐	
Pesticides	☒	☐	
Phthalates	☒	☐	
Residual solvents	☐	☒	Toluene: < 1 ppm
Heavy metals		ppm	
	total	≤ 10	

4.5 Allergens

Product complies with Regulation (EC) No. 1223/2009 Annex III (position no. 67 – 92) regarding the limit value of allergenic ingredients.

The product may contain*:

Benzyl Alcohol (100-51-6): < 10 ppm

Benzyl Benzoate (120-51-4) < 10 ppm

4.6 VOC

Product does not contain any volatile organic compound.

4.7 CMR

Product is not rated as CMR (category 1A, 1B and 2) and does not contain any ingredient rated as CMR according to Regulation (EC) No. 1223/2009 in association with Regulation (EC) No. 1272/2008/EC.

4.8 SVHC

Product is neither listed as SVHC substances nor contains any material with is listed as SVHC substance.

4.9 Nanomaterial

Product is not embraced by article 16 Regulation (EC) No. 1223/2009.

4.10 Animal testing

The Cosphatec GmbH has not conducted any animal testing for cosmetic purpose since March 11th 2009.

4.11 Irradiation

Product has not been irradiated in any step of the entire production process.

4.12 Origin

Substances (INCI name)	Synthetic	Vegetal	Biotechnology
Sodium Levulinate	☐	☒ Natural levulinic acid partly neutralized by the presence of NaOH Name of the plant: Sugar cane Origin: China	☐ Microorganism used:
Sodium Benzoate	☒	☐ Name of the plant: Origin:	☐ Microorganism used:

4.13 GMO

The product is not subject to labelling according to Regulations (EC) No. 1829/2003 and 1830/2003.

4.14 Certifications

COSMOS

Other Information

This information and our technical application advice are given to the best of our knowledge, but they are for information purposes only and given without responsibility. The advice doesn't exempt you from doing your own testing, particularly with regard to the qualification of our products for its intended processes and purposes. Application, use and handling of our products take place out of our control and are solely your responsibility. The sale of our products occurs according to our current general sales terms and delivery conditions.

* not expected to be present due to raw materials, production process and used equipment. Not regularly analysed.

[+]analysis results of a representative batch

[#]expected to be present due to raw materials, production process and used equipment. Periodically analysed.