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Cosphatec

TECHNICAL DATASHEET

COSPHADERM® OCTIOL

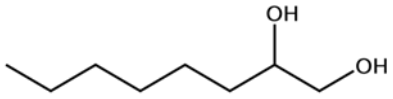
1.1 GENERAL INFORMATION

Trade name:	Cosphaderm® Octiol
Item No.:	02-006-xxxx
Supplier:	Cosphatec GmbH Hopfenmarkt 33 20457 Hamburg Germany
Chemical name:	Octane-1,2-diol
Other names:	Octiol
INCI name:	Caprylyl Glycol
CAS No.:	1117-86-8
EINECS/ EC No.:	214-254-7
IECIC:	Caprylyl Glycol

1.2 PRODUCT COMPOSITION

INCI name	CAS No.
Caprylyl Glycol	1117-86-8

1.3 CHEMICAL STRUCTURE



1.4 PRODUCT SHORT DESCRIPTION

Cosphaderm® Octiol is a member of the versatile family of glycols. This versatility is expressed by many important functions. For example, Caprylyl Glycol shows moisturizing and emollient properties as well as conditioning properties for skin and hair care.

Experiments to determine the potential of Cosphaderm® Octiol to stabilize emulsions have been carried out via static light scattering. At a concentration of 0.6 %, Cosphaderm® Octiol reduced the particle size by 20 %, thereby leading to increased emulsion stability.

Another core property of Caprylyl Glycol is its antimicrobial activity.

Table 1: MIC Data of Cosphaderm® Octiol[1]

Species	MIC (%)
E. coli	0.63
S. aureus	1.25
P. aeruginosa	0.63
C. albicans	0.31
A. niger / brasiliensis	0.16

Additionally, Cosphaderm® Octiol shows a remarkable synergistic effect in combination with other antimicrobial substances, which offers the possibility to combine 1,2-Octanediol with other substances to achieve a comprehensive antimicrobial protection of your formulation.

1.5 APPLICATION

Recommended concentration:	0.8 % (single use as alternative preservative) 0.6 % (combined with 1.5 % Cosphaderm® Pentiol GL) 0.5 % (combined with 0.7 % Cosphaderm® Hexiol)
Conditions:	water dispersible, soluble in alcohol, miscible with oil
Hints:	Method 1: add recommended concentration to the water phase of your formulation Method 2: add recommended concentration to the fat phase of your formulation

	Method 3: add recommended concentration to the final formulation.

2.1 SPECIFIED DATA ANALYSED PER BATCH

Purity:	min 98.0 [A]% (GC-FID)
Water:	max 0.3 % w/w (Karl Fischer titration)
Colour:	max 15 (APHA Hazen)

3.1 PHYSICAL AND CHEMICAL PROPERTIES

Molecular formula:	$C_8H_{18}O_2$
Molecular weight:	146.23 g/mol
Appearance:	white solid
Odour:	characteristic
Melting point:	28-35 °C (OECD 102)
Boiling point	267 °C (OECD 103)
Flash point:	140 °C (EC, A.9)
pH:	-
Solubility:	in water: 7.5g/l (OECD 105)

3.2 PACKING AND STORAGE CONDITIONS

Packing sizes:	22 kg in HDPE drums, 180 kg in 205 l steel drums (HDPE inner coating)
Storage conditions:	Store in the air-tight original sealed containers protected from direct sunlight, moisture and heat at ambient temperature (15-25°C). Brief deviation from

	the storage temperature e.g. during transport does not impair product quality or shelf life.
Shelf life:	At least 36 months if unopened and stored under proper conditions

4.1 REGULATORY COMPLIANCE

Caprylyl Glycol (CAS: 1117-86-8) is included/listed in the following international inventories:

EINECS (Europe); TCSI (Taiwan); ENCS (Japan); TSCA (USA); DSL (Canada); KECI (Korea); IECSC (China); AICS (Australia); 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, colourants or other are added.

4.4 IMPURITIES

	Not expected*	Present#	ppm
BSE/TSE	☒	☐	
Dioxin	☒	☐	
Formaldehyde	☒	☐	
Gluten	☒	☐	
Lactose	☒	☐	
Pesticides	☒	☐	
Phthalates	☒	☐	
Residual solvents	☐	☒	Formic Acid < 5000

Heavy metals		ppm
	Total	≤ 10
	Arsenic (As)⁺	≤ 0.5
	Lead (Pb)⁺	≤ 0.5
	Mercury (Hg)⁺	≤ 0.1
	Cadmium (Cd)⁺	≤ 0.1

4.5 ALLERGENS

Product does not contain any of the 26 allergenic flavours or fragrances listed in Regulation (EC) No. 1223/2009 Annex III.

4.6 VOC

Product does not contain any additional volatile organic compounds.

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 which 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
Caprylyl Glycol	☒	☐	☐
		Name of the plant:	Microorganism used:
		Plant part used:	
		Origin:	

4.13 GMO

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

OTHER INFORMATION

This information and our technical application advice regarding use and handling are given to the best of our knowledge, but they are for information purposes only. Cosphatec GmbH bears no responsibility for deviated use or handling of the products. Customers or manufacturers are not released from their responsibility to perform own testing particularly with regard to the qualification of our products for intended processes and purposes. 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.

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

+analysis results of a representative batch

[1] Pillai, R.; Schmaus, G.; Pfeiffer, A.; Lange, S; Trunet, A.: „1,2-Alkanediols for Cosmetic Preservation". In: Cosmetics & Toiletries, Oct 1, 2008;