

TECHNICAL DATASHEET

Cosphaderm® AP

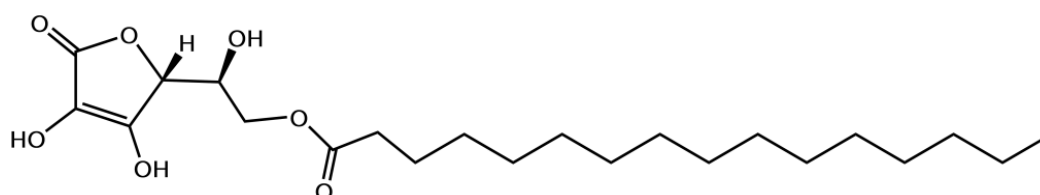
1.1 General information

Trade name:	Cosphaderm® AP
Item no.:	04-001-xxxx
Supplier	Cosphatec GmbH Hopfenmarkt 33 20354 Hamburg Germany
Chemical name:	[(2S)-2-[(R)-3,4-Dihydroxy-5-oxo-2,5-dihydrofuran-2-yl]2-hydroxyethyl]-hexadecanoate
Other names:	6-Palmitoylascorbic acid, Vitamin C palmitate, 6-O-Palmitoylascorbic acid, E 304
INCI name:	Ascorbyl Palmitate
CAS No.:	137-66-6
EINECS/ EC No.:	205-305-4
IECIC:	Ascorbyl Palmitate

1.2 Product composition

INCI name	CAS No.
Ascorbyl Palmitate	137-66-6

1.3 Chemical structure



1.4 Product short description

Cosphaderm® AP is a neutral oil & fat soluble ascorbic acid ester for the nutrition and cosmetics industry with antioxidative and emulsifying properties. Ascorbyl Palmitate itself displays little activity, but inside the skin the physiologically active Ascorbylic Acid is released. It is used to promote the antioxidative efficiency of other antioxidants and is thus often combined with Tocopherols (Vitamin E) to strengthen their antioxidative power. Furthermore the material is used as a skin lightening agent in concentrations up to 4.0 %.

Add Cosphaderm® AP to the fat or oil phase of your formulation and heat and stir if necessary until the product is completely dissolved. Recommended concentrations for Food are between 100 and 300 ppm depending on the application. Please refer to Directive 1333/2008/EC and/or national legislation for maximum in-use levels.

1.5 Application

Recommended concentration:	Cosmetics:	0.05 % (in combination with Tocopherols) 4.0 % (as skin lightening agent)
	Food:	100 – 300 ppm (refer to Directive 1333/2008/EC)
Conditions:	fat and oil soluble	
Hints:	Add to the fat or oil phase, heat and stir if necessary	

2.1 Specified data analyzed per batch

Appearance:	solid (powder)
Colour:	white to yellowish-white
Purity:	min 98.0 %
Melting Point:	107 – 117 °C
Specific Rotation:	+21 – +24 °
Loss on Drying:	max. 1.0 %
Sulphated Ash:	max 0.1 %
Heavy Metals:	max 10 ppm
Lead:	max 2 ppm
Arsenic:	max 3 ppm
Residue on Ignition:	max. 0.1 %

3.1 Physical and chemical properties

Molecular formula:	C ₂₂ H ₃₈ O ₇
Molecular weight:	414.5 g/mol

Appearance:	white to yellowish-white powder
Odour:	faint, characteristic
Solubility:	ca. 300 mg/L in water Well soluble in Ethanol

3.2 Packing and Storage conditions

Packing sizes:	10 kg bags
Storage conditions:	The product should be stored between 15 and 25 °C in the air-tight original sealed container protected from direct sunlight, moisture and heat.
Shelf life:	At least 24 months if unopened and stored under proper conditions

4.1 Regulatory compliance

Ascorbyl Palmitate (CAS: 137-66-6) is included/listed in the following international inventories:

EINECS (Europe); TCSI (Taiwan); ENCS (Japan); TSCA (USA); DSL (Canada); KECI (Korea); IECSC (China); 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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Dioxin	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Formaldehyde	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Gluten	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Lactose	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Pesticides	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Phthalates	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Residual solvents	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Heavy metals	ppm		
	total	≤ 10	

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 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
Ascorbyl Palmitate	<input type="checkbox"/>	<input checked="" type="checkbox"/> Name of the plant: Ascorbic acid : maize Palmitic acid: oil palm Plant part used: Fruits	<input checked="" type="checkbox"/> Microorganism used: Ascorbic acid is produced by fermentation, without involvement of genetically modified organisms

4.13 GMO

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

4.14 Certifications

ECOCERT

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.

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