

SAFETY DATA SHEET

according to Regulation (EC) No.1907/2006

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Material Safety Data Sheet

Potassium Cetyl Phosphate msds

Section 1: Identification of the Substance/Preparation and of the Company/Undertaking

Identification of the substance or preparation

Product Name	:	Potassium Cetyl Phosphate
INCI Name	:	Potassium Cetyl Phosphate
Chemical name	:	Potassium cetyl phosphate (1:1)
Synonym	:	- Phosphoric acid monohexadecyl ester potassium salt (1:1) - Potassium hexadecyl hydrogen phosphate - Potassium monocetyl phosphate - 1-Hexadecanol hydrogen phosphate potassium salt
Empirical formula		C ₁₆ H ₃₄ O ₄ P · K
Product Number	:	C07001S
CAS#	:	19035-79-1
EINECS	:	242-768-1
Use of the substance/preparation	:	anionic oil/water emulsifier and stabilizer for the preparation of skin-care and sun-care products

Company/undertaking identification

M.C.Biotec Inc.

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Section 2: Hazards Identification

Emergency Overview

OSHA Hazards

No known OSHA hazards

Not a dangerous substance according to GHS.

NFPA Rating

Health hazard:	0
Fire:	1
Reactivity Hazard:	0
Potential Health Effects	
Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.
Ingestion	May be harmful if swallowed.

Section 3: Composition and Information on Ingredients

Characterization : Alkyl phosphoric acid ester potassium salt

Formula : $C_{16}H_{34}O_4P \cdot K$

Molecular Weight : 360.40 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
Potassium Cetyl Phosphate			
19035-79-1	242-768-1	-	100%

Section 4: First Aid Measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

Section 5: Fire Fighting Measures

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Oxides of phosphorus,

Potassium oxide

Section 6: Accidental Release Measures**Personal precautions**

Avoid dust formation. Avoid breathing vapors, mist or gas.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7: Handling and Storage**Precautions for safe handling**

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for safe storage

- Room temperature
- Protected from light
- Protected from humidity

Validity - 24 months, < 25 °C, in the unopened original container

Section 8: Exposure Controls/Personal Protection

Contains no substances with occupational exposure limit values.

Personal protective equipment**Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95(US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

General industrial hygiene practice.

Specific engineering controls

Use mechanical exhaust or laboratory fume hood to avoid exposure.

Section 9: Physical and Chemical Properties

Appearance

Form	powder
Colour	White to off-white
Odour	Slight, fatty

Safety data

pH (1% in water, 20°C)	6.5-8.5
Solubility	~160mg/l, water (20°C) Easily soluble, water (~85°C) Soluble, oils and fats (~85°C)
Melting temperature	161 to 166°C
Flash point (liquid)	>110°C
Note	-acid value: 125 to 155 mg KOH/g

Section 10: Stability and Reactivity

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

no data available

Conditions to avoid

- heat
- light
- humidity

Materials to avoid

- metal salts, alkali and alkaline earth metals
- hard, calcium-containing water; use only with distilled or deionised water

Hazardous decomposition products

- Phosphoric acid

Hazardous Polymerization

Will not occur under normal conditions and storage.

Section 11: Toxicological Information
Acute toxicity

- LD₅₀ > 5000 mg/kg (oral, rat)
- LD₅₀ > 2000 mg/kg (dermal, rat)

Local effects

- skin: non-irritant (rabbit)
- skin: not phototoxic (guinea pig)
- skin: non-irritant (man); 6% solution
- easily resorbed through the skin (various species)
- eye: moderately irritating (rabbit; OECD No. 405)

Sensitization

- not photoallergenic (guinea pig); 10% solution
- non-sensitizing

Subchronic toxicity

- NOAEL > 900 mg/kg/d (oral, rat; 42 d)
- NOAEL 800 mg/kg/d (oral, rat; 13 weeks)

Mutagenicity

- not mutagenic (bacterial in vitro test system)

Section 12: Ecological Information
Ready biodegradability

- not readily biodegradable
12 %, 28 d
(Manometric Respirometry Test, OECD No. 301 F)

Inherent biodegradability

- well inherently biodegradable
86 %, 28 d
(MITI Test II, OECD No. 302 C)

Ecotoxicity

- water soluble part barely toxic for fish (rainbow trout)
LC₅₀ 500 mg/l (nominal concentration)
(OECD No. 203)

Air pollution	<ul style="list-style-type: none"> - barely inhibitory on aerobic bacterial respiration (activated sludge) NOEL\geq100 mg/l (nominal concentration) (Manometric Respirometry Test, OECD No. 301 F) - observe local/national regulations
Section 13: Disposal Considerations	
Product	
Offer surplus and non-recyclable solutions to a licensed disposal company.	
Contaminated packaging	
Dispose of as unused product.	
Section 14: Transport Information	
DOT (US)	
Not dangerous goods	
IMDG	
Not dangerous goods	
IATA	
Not dangerous goods	
Section 15: Regulatory Information	
OSHA Hazards	
No known OSHA hazards	
SARA 302 Components	
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.	
SARA 313 Components	
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.	
SARA 311/312 Hazards	
No SARA Hazards	
Massachusetts Right To Know Components	
No components are subject to the Massachusetts Right to Know Act.	
California Prop. 65 Components	
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.	
Note	- no classification and labelling according to EU directives

Water hazard class (Germany)	1: weakly hazardous for water (own classification according to directive VwVwS of 17.05.1999)
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Section 16: Other Information**Further information**

The information above is based on our present knowledge. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

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