

#### Cetyl palmitate synthetic

article number: **9229** Version: **2.1 en** Replaces version of: 2021-10-18 Version: (2) date of compilation: 2015-10-23 Revision: 2021-11-05

# SECTION 1: Identification of the substance/mixture and of the company/ undertaking

#### 1.1 Product identifier

Identification of the substance	Cetyl palmitate synthetic
Article number	9229
EC number	208-736-6
CAS number	540-10-3

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses:	
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Uses advised against:

Laboratory chemical Laboratory and analytical use

Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household).

#### 1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co KG Schoemperlenstr. 3-5 D-76185 Karlsruhe Germany

**Telephone:**+49 (0) 721 - 56 06 0 **Telefax:** +49 (0) 721 - 56 06 149 **e-mail:** sicherheit@carlroth.de **Website:** www.carlroth.de

Competent person responsible for the safety data :Department Health, Safety and Environment sheet:

#### e-mail (competent person):

## sicherheit@carlroth.de

#### 1.4 Emergency telephone number

Name	Street	Postal code/city	Telephone	Website
National Poisons Information Service City Hospital	Dudley Rd	B187QH Birmingham	844 892 0111	

# **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

## Classification according to Regulation (EC) No 1272/2008 (CLP)

This substance does not meet the criteria for classification in accordance with Regulation No 1272/ 2008/EC.

## 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP) not required



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## 2.3 Other hazards

#### Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

# **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Name of substance	Cetyl palmitate
Molecular formula	$C_{32}H_{64}O_{2}$
Molar mass	480,9 <sup>g</sup> / <sub>mol</sub>
CAS No	540-10-3
EC No	208-736-6

# **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures



## **General notes**

Take off contaminated clothing.

#### **Following inhalation**

Provide fresh air.

#### Following skin contact

Rinse skin with water/shower.

## Following eye contact

Rinse cautiously with water for several minutes.

#### **Following ingestion**

Rinse mouth. Call a doctor if you feel unwell.

- **4.2** Most important symptoms and effects, both acute and delayed Symptoms and effects are not known to date.
- **4.3 Indication of any immediate medical attention and special treatment needed** none



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## **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media



#### Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings water, foam, dry extinguishing powder, ABC-powder

#### Unsuitable extinguishing media

water jet

#### 5.2 Special hazards arising from the substance or mixture

Combustible.

#### Hazardous combustion products

In case of fire may be liberated: Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

# SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures



#### For non-emergency personnel

No special measures are necessary.

6.2 Environmental precautions

Keep away from drains, surface and ground water.

#### 6.3 Methods and material for containment and cleaning up

#### Advice on how to contain a spill

Covering of drains. Take up mechanically.

#### Advice on how to clean up a spill

Take up mechanically.

#### Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

#### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.



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# **SECTION 7: Handling and storage**

- 7.1 Precautions for safe handling
   No special measures are necessary.
   Advice on general occupational hygiene
   Keep away from food, drink and animal feedingstuffs.
- **7.2 Conditions for safe storage, including any incompatibilities** Store in a dry place.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice:

Specific designs for storage rooms or vessels

Recommended storage temperature: 15 - 25 °C

7.3 Specific end use(s)

No information available.

## **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

## **National limit values**

**Occupational exposure limit values (Workplace Exposure Limits)** 

This information is not available.

8.2 Exposure controls

## Individual protection measures (personal protective equipment)

## Eye/face protection



Use safety goggle with side protection.

**Skin protection** 



## hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374.

## • type of material

NBR (Nitrile rubber)

#### material thickness

>0,11 mm



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#### • breakthrough times of the glove material

>480 minutes (permeation: level 6)

#### • other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

#### **Respiratory protection**



Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P1 (filters at least 80 % of airborne particles, colour code: White).

#### **Environmental exposure controls**

Keep away from drains, surface and ground water.

## **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

Physical state	solid
Form	granulate
Colour	white
Odour	characteristic
Melting point/freezing point	54,3 °C at 1.013 hPa (ECHA)
Boiling point or initial boiling point and boiling range	360 °C
Flammability	this material is combustible, but will not ignite readily
Lower and upper explosion limit	not determined
Flash point	not applicable
Auto-ignition temperature	not determined
Decomposition temperature	not relevant
pH (value)	not applicable
Kinematic viscosity	not relevant
Solubility(ies)	
Water solubility	insoluble
Partition coefficient	
Partition coefficient n-octanol/water (log value):	this information is not available
Vapour pressure	0 hPa at 20 °C



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Density	not determined
Relative vapour density	information on this property is not available
Bulk density	~ 400 <sup>kg</sup> / <sub>m³</sub>
Particle characteristics	No data available.
Other safety parameters	
Oxidising properties	none
Other information	
Information with regard to physical hazard classes:	hazard classes acc. to GHS (physical hazards): not relevant
Other safety characteristics:	There is no additional information.

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

9.2

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

#### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 Possibility of hazardous reactions

Violent reaction with: strong oxidiser

#### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

## 10.5 Incompatible materials

There is no additional information.

## **10.6 Hazardous decomposition products**

Hazardous combustion products: see section 5.

# **SECTION 11: Toxicological information**

## 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

## Classification according to GHS (1272/2008/EC, CLP)

This substance does not meet the criteria for classification in accordance with Regulation No 1272/ 2008/EC.

#### Acute toxicity

Shall not be classified as acutely toxic.



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Acute toxicity					
Exposure route	Endpoint	Value	Species	Method	Source
oral	LD50	>5.000 <sup>mg</sup> / <sub>kg</sub>	rat		ECHA
dermal	LD50	>2.000 <sup>mg</sup> / <sub>kg</sub>	rat		ECHA

## Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

#### Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

#### Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

#### Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

#### Carcinogenicity

Shall not be classified as carcinogenic.

#### **Reproductive toxicity**

Shall not be classified as a reproductive toxicant.

## Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

#### Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

#### **Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

## Symptoms related to the physical, chemical and toxicological characteristics

#### • If swallowed

Data are not available.

• If in eyes

Data are not available.

• If inhaled

Data are not available.

#### • If on skin

Data are not available.

#### Other information

Health effects are not known.

**11.2 Endocrine disrupting properties** Not listed.

## **11.3** Information on other hazards

There is no additional information.



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# **SECTION 12: Ecological information**

## 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute)				
Endpoint Value		Species	Source	Exposure time
LC50	>100 <sup>mg</sup> / <sub>l</sub>	fish	ECHA	96 h
LL50	>100 <sup>mg</sup> / <sub>l</sub>	fish	ECHA	96 h
EL50	>0,128 <sup>µg</sup> / <sub>l</sub>	aquatic invertebrates	ECHA	48 h

#### Aquatic toxicity (chronic)

Endpoint	Value Species		Source	Exposure time
EL50	>100 <sup>mg</sup> / <sub>l</sub>	aquatic invertebrates	ECHA	21 d
EC50	>1.000 <sup>mg</sup> / <sub>l</sub>	microorganisms	ECHA	3 h

#### Biodegradation

The substance is readily biodegradable.

#### 12.2 Process of degradability

Theoretical Oxygen Demand: 3,128 <sup>mg</sup>/<sub>mg</sub> Theoretical Carbon Dioxide: 2,929 <sup>mg</sup>/<sub>mg</sub>

Process of degradability		
Process	Degradation rate	Time
oxygen depletion	75,3 %	28 d

#### 12.3 Bioaccumulative potential

Data are not available.

#### 12.4 Mobility in soil

Γ

Data are not available.

**12.5 Results of PBT and vPvB assessment** Data are not available.

# **12.6 Endocrine disrupting properties** Not listed.

#### 12.7 Other adverse effects

Data are not available.



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## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods



Consult the appropriate local waste disposal expert about waste disposal.

## Sewage disposal-relevant information

Do not empty into drains.

#### 13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Waste catalogue ordinance (Germany).

#### 13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

## **SECTION 14: Transport information**

14.1 UN number or ID r	number
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14.2 UN proper shipping name

- 14.3 Transport hazard class(es)
- 14.4 Packing group
- 14.5 Environmental hazards
- 14.6 Special precautions for user

There is no additional information.

## 14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

#### 14.8 Information for each of the UN Model Regulations

# Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - Additional information

Not subject to ADR, RID and ADN.

## **International Maritime Dangerous Goods Code (IMDG) - Additional information** Not subject to IMDG.

**International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information** Not subject to ICAO-IATA.

not subject to transport regulations

not assigned

none

not assigned

non-environmentally hazardous acc. to the dangerous goods regulations



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# SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

**Relevant provisions of the European Union (EU)** 

**Restrictions according to REACH, Annex XVII** 

not listed

**List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list** Not listed.

#### **Seveso Directive**

2012/	18/EU (Seveso III)		
No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the ap- plication of lower and upper-tier re- quirements	Notes
	not assigned		

#### **Deco-Paint Directive**

VOC content	0 %
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#### **Industrial Emissions Directive (IED)**

VOC content	0 %
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# Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

not listed

# Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

#### Water Framework Directive (WFD)

not listed

#### Regulation on the marketing and use of explosives precursors

not listed

#### **Regulation on drug precursors**

not listed

#### Regulation on substances that deplete the ozone layer (ODS)

not listed

#### Regulation concerning the export and import of hazardous chemicals (PIC)

not listed

#### **Regulation on persistent organic pollutants (POP)**

not listed

#### Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions un-



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der the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

lational inventories				
Inventory	Status			
AICS	substance is listed			
DSL	substance is listed			
IECSC	substance is listed			
ECSI	substance is listed			
REACH Reg.	substance is listed			
CSCL-ENCS	substance is listed			
KECI	substance is listed			
INSQ	substance is listed			
NZIoC	substance is listed			
PICCS	substance is listed			
TCSI	substance is listed			
TSCA	substance is listed			
	InventoryAICSDSLDSLIECSCECSIREACH Reg.CSCL-ENCSKECIINSQNZIOCPICCSTCSI			

#### Legend

AICS	Australian Inventory of Chemical Substances
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
INSQ	National Inventory of Chemical Substances
KECI	Korea Existing Chemicals Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg.	REACH registered substances
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substance Control Act

#### 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance.

# **SECTION 16: Other information**

## Indication of changes (revised safety data sheet)

Alignment to regulation: Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

#### Restructuring: section 9, section 14

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
2.2	Signal word: not required		yes
2.3	Other hazards: There is no additional information.	Other hazards	yes
2.3		Results of PBT and vPvB assessment: According to the results of its assessment, this substance is not a PBT or a vPvB.	yes



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#### Abbreviations and acronyms

ADNAccord européen relatif au transport international des marchandises dangereuse tion intérieures (European Agreement concerning the International Carriage of D land Waterways)ADRAccord relatif au transport international des marchandises dangereuses par route ing the International Carriage of Dangerous Goods by RoadCASChemical Abstracts Service (service that maintains the most comprehensive list of CLPCLPRegulation (EC) No 1272/2008 on classification, labelling and packaging of subsDGRDangerous Goods Regulations (see IATA/DGR)EC50Effective Concentration 50 %. The EC50 corresponds to the concentration of a tes 50 % changes in response (e.g. on growth) during a specified timeEC NoThe EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digi fier of substances commercially available within the EU (EuropeanEINECSEuropean Inventory of Existing Commercial Chemical SubstanEL50Effective Loading 50 %: the EL50 corresponds to the loading rate required to prod	angerous Goods by In- e (Agreement concern- l) f chemical substances) tances and mixtures ted substance causing interval it EC number, an identi-
ing the International Carriage of Dangerous Goods by RoadCASChemical Abstracts Service (service that maintains the most comprehensive list ofCLPRegulation (EC) No 1272/2008 on classification, labelling and packaging of subsDGRDangerous Goods Regulations (see IATA/DGR)EC50Effective Concentration 50 %. The EC50 corresponds to the concentration of a tes 50 % changes in response (e.g. on growth) during a specified timeEC NoThe EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digi fier of substances commercially available within the EU (EuropeanEINECSEuropean Inventory of Existing Commercial Chemical SubstanEL50Effective Loading 50 %: the EL50 corresponds to the loading rate required to prod	f chemical substances) tances and mixtures ted substance causing interval it EC number, an identi-
CLP       Regulation (EC) No 1272/2008 on classification, labelling and packaging of subs         DGR       Dangerous Goods Regulations (see IATA/DGR)         EC50       Effective Concentration 50 %. The EC50 corresponds to the concentration of a tes 50 % changes in response (e.g. on growth) during a specified time         EC No       The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digination of substances commercially available within the EU (European EINECS)         EINECS       European Inventory of Existing Commercial Chemical Substan         EL50       Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce the sevender of	tances and mixtures ted substance causing interval it EC number, an identi-
DGR       Dangerous Goods Regulations (see IATA/DGR)         EC50       Effective Concentration 50 %. The EC50 corresponds to the concentration of a tes 50 % changes in response (e.g. on growth) during a specified time         EC No       The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digi fier of substances commercially available within the EU (European         EINECS       European Inventory of Existing Commercial Chemical Substan         EL50       Effective Loading 50 %: the EL50 corresponds to the loading rate required to prod	ted substance causing interval it EC number, an identi-
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50 % changes in response (e.g. on growth) during a specified time         EC No       The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digination of substances commercially available within the EU (European         EINECS       European Inventory of Existing Commercial Chemical Substances         EL50       Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce	interval it EC number, an identi-
Fier of substances commercially available within the EU (European         EINECS       European Inventory of Existing Commercial Chemical Substan         EL50       Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce	
EL50 Effective Loading 50 %: the EL50 corresponds to the loading rate required to prod	
	ces
of the test organisms	luce a response in 50%
ELINCS European List of Notified Chemical Substances	
GHS "Globally Harmonized System of Classification and Labelling of Chemicals" develo	oped by the United Na-
IATA International Air Transport Association	
IATA/DGR Dangerous Goods Regulations (DGR) for the air transport (IAT	ΓΑ)
ICAO International Civil Aviation Organization	
IMDG International Maritime Dangerous Goods Code	
LC50 Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested s lethality during a specified time interval	substance causing 50 %
LD50 Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing specified time interval	3 50 % lethality during a
LL50 Lethal Loading 50 %: the LL50 corresponds to the loading rate causing 5	50 % lethality
NLP No-Longer Polymer	
PBT Persistent, Bioaccumulative and Toxic	
REACH Registration, Evaluation, Authorisation and Restriction of Chem	icals
RID Règlement concernant le transport International ferroviaire des marchandises tions concerning the International carriage of Dangerous goods b	Dangereuses (Regula- oy Rail)
SVHC Substance of Very High Concern	
VOC Volatile Organic Compounds	
vPvB Very Persistent and very Bioaccumulative	

#### Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).



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#### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.