acc. to Regulation (EC) No. 1907/2006 (REACH)



### Cetylpyridinium chloride monohydrate (CPC) ≥98 %, for biochemistry

article number: **CN27** Version: **3.0 en** Replaces version of: 2021-11-24 Version: (2) date of compilation: 2016-02-03 Revision: 2024-03-02

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

### 1.1 Product identifier

Identification of the substance	<b>Cetylpyridinium chloride monohydrate (CPC)</b> ≥98 %, for biochemistry
Article number	CN27
EC number	204-593-9
CAS number	6004-24-6
Delevent identified wass of the substance of w	internet man a defined a value of

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

Relevant identified uses:	Laboratory chemical Laboratory and analytical use
Uses advised against:	Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household). Food, drink and animal feeding- stuffs.

### 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 acc. to GHS

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Section	Hazard class	Cat- egory	Hazard class and category	Hazard statement
3.10	Acute toxicity (oral)	3	Acute Tox. 3	H301
3.1I	Acute toxicity (inhal.)	2	Acute Tox. 2	H330
3.2	Skin corrosion/irritation	2	Skin Irrit. 2	H315
3.3	Serious eye damage/eye irritation	2	Eye Irrit. 2	H319
3.8R	3.8R Specific target organ toxicity - single exposure (respirat- ory tract irritation)		STOT SE 3	H335
4.1A	Hazardous to the aquatic environment - acute hazard	1	Aquatic Acute 1	H400
4.1C	Hazardous to the aquatic environment - chronic hazard	1	Aquatic Chronic 1	H410

For full text of abbreviations: see SECTION 16

### The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

### 2.2 Label elements

### Labelling

#### Signal word Danger

#### **Pictograms**

GHS06, GHS09



### **Hazard statements**

H301	Toxic if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H330	Fatal if inhaled
H335	May cause respiratory irritation
H410	Very toxic to aquatic life with long lasting effects

### **Precautionary statements**

### **Precautionary statements - prevention**

- P273 Avoid release to the environment
- P280 Wear protective gloves/protective clothing/eye protection/face protection

### **Precautionary statements - response**

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact
	lenses, if present and easy to do. Continue rinsing

### **Precautionary statements - storage**

P405 Store locked up

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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.

### **Endocrine disrupting properties**

Does not contain an endocrine disruptor (ED) at a concentration of  $\ge 0,1\%$ .

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

### 3.1 Substances

Name of substance	Cetylpyridinium chloride monohydrate (CPC)
Molecular formula	$C_{21}H_{38}CIN \cdot H_2O$
Molar mass	358 <sup>g</sup> / <sub>mol</sub>
CAS No	6004-24-6
EC No	204-593-9

### Substance, Specific Conc. Limits, M-factors, ATE

Specific Conc. Limits	M-Factors	ATE	Exposure route
-	M-factor (acute) = 100	200 <sup>mg</sup> / <sub>kg</sub> 0,09 <sup>mg</sup> / <sub>l</sub> /4h	oral inhalation: dust/ mist

# **SECTION 4: First aid measures**

### 4.1 Description of first aid measures



### **General notes**

Self-protection of the first aider.

### **Following inhalation**

Call a physician immediately. If breathing is irregular or stopped, administer artificial respiration.

### Following skin contact

Rinse skin with water/shower. In case of skin irritation, consult a physician.

### Following eye contact

Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. In case of eye irritation consult an ophthalmologist.

### **Following ingestion**

Rinse mouth immediately and drink plenty of water. Call a physician immediately.

- **4.2 Most important symptoms and effects, both acute and delayed** Irritation, Cough, Dyspnoea
- **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, alcohol resistant 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: Nitrogen oxides (NOx), 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. Do not allow firefighting water to enter drains or water courses. 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

Use personal protective equipment as required. Avoid contact with skin, eyes and clothes. Do not breathe dust.

#### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

### 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. Control of dust.

### 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

Use extractor hood (laboratory). Provision of sufficient ventilation. Avoid dust formation. Clear contaminated areas thoroughly.

### Measures to prevent fire as well as aerosol and dust generation

Removal of dust deposits.

### Measures to protect the environment

Avoid release to the environment.

### Advice on general occupational hygiene

When using do not eat or drink. Thorough skin-cleansing after handling the product.

### 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:

Store locked up.

### Ventilation requirements

Keep any substance that emits harmful vapours or gases in a place that allows these to be permanently extracted. Use local and general ventilation.

### 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)**

Coun try	Name of agent	CAS No	Identifi- er	TWA [mg/ m³]	STEL [mg/ m³]	Ceil- ing-C [mg/ m <sup>3</sup> ]	Nota- tion	Source
GB	dust		WEL	10			i	EH40/2005
GB	dust		WEL	4			r	EH40/2005

Notation

 

 Ceiling-C
 Ceiling value is a limit value above which exposure should not occur

 i
 Inhalable fraction

 r
 Respirable fraction

 STEL
 Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15minute period (unless otherwise specified)

 TWA
 Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

United Kingdom (en)

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### 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. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a consider-able reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

### • type of material

NBR (Nitrile rubber)

#### • material thickness

>0,11 mm

### • 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). P3 (filters at least 99,95 % of airborne particles, colour code: White).

### **Environmental exposure controls**

Keep away from drains, surface and ground water.



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

9.1	Information on basic physical and chemical pro	operties
	Physical state	solid
	Form	powder
	Colour	whitish
	Odour	characteristic
	Melting point/freezing point	82 – 86 °C
	Boiling point or initial boiling point and boiling range	not determined
	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	234 °C
	pH (value)	5 – 5,4 (in aqueous solution: 10 <sup>g</sup> / <sub>l</sub> , 20 °C)
	Kinematic viscosity	not relevant
	Solubility(ies)	
	Water solubility	50 <sup>g</sup> / <sub>l</sub> at 20 °C
	Partition coefficient	
	Partition coefficient n-octanol/water (log value):	1,71
	Vapour pressure	not determined
	Density and/or relative density	
	Density	not determined
	Relative vapour density	Information on this property is not available.
	Bulk density	~370 <sup>kg</sup> / <sub>m³</sub>
	Particle characteristics	No data available.
	Other safety parameters	
	Oxidising properties	none
9.2	Other information	
	Information with regard to physical hazard classes:	hazard classes acc. to GHS (physical hazards): not relevant



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Other safety characteristics:

There is no additional information.

# **SECTION 10: Stability and reactivity**

### 10.1 Reactivity

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

Keep away from heat. Decompostion takes place from temperatures above: 234 °C.

### **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 toxicological effects

### **Classification acc. to GHS**

### Acute toxicity

Toxic if swallowed. Fatal if inhaled.

Acute toxicity						
Exposure route	Endpoint	Value	Species	Method	Source	
oral	LD50	200 <sup>mg</sup> / <sub>kg</sub>	rat			
inhalation: dust/ mist	LC50	0,09 <sup>mg</sup> / <sub>l</sub> /4h	rat			

### Skin corrosion/irritation

Causes skin irritation.

### Serious eye damage/eye irritation

Causes serious eye irritation.

### **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.

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### **Reproductive toxicity**

Shall not be classified as a reproductive toxicant.

### Specific target organ toxicity - single exposure

May cause respiratory irritation.

### 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

Causes serious eye irritation

### • If inhaled

Irritation to respiratory tract, cough, Dyspnoea

### • If on skin

causes skin irritation

### Other information

none

### **11.2** Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of  $\ge 0,1\%$ .

### 11.3 Information on other hazards

There is no additional information.

### **SECTION 12: Ecological information**

### 12.1 Toxicity

Very toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute)						
Endpoint	Value	Species	Source	Exposure time		
LC50	0,01 <sup>mg</sup> / <sub>l</sub>	common carp (Cyprinus caprio)		96 h		

### 12.2 Persistence and degradability

Theoretical Oxygen Demand (without nitrification):  $2,637 \frac{mg}{mg}$ Theoretical Oxygen Demand (with nitrification):  $2,815 \frac{mg}{mg}$ Theoretical Carbon Dioxide:  $2,581 \frac{mg}{mg}$  acc. to Regulation (EC) No. 1907/2006 (REACH)



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Process of degradability			
Process	Degradation rate	Time	
biotic/abiotic	25 %	28 d	

### 12.3 Bioaccumulative potential

Does not significantly accumulate in organisms.

n-octanol/water (log KOW)	1,71
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### 12.4 Mobility in soil

Data are not available.

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

### 12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of  $\ge 0,1\%$ .

### 12.7 Other adverse effects

Data are not available.

### **SECTION 13: Disposal considerations**

### 13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

### Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

### Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

### 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.

### Properties of waste which render it hazardous

- **HP 4** irritant skin irritation and eye damage
- **HP 5** specific target organ toxicity (STOT)/aspiration toxicity
- HP 6 acute toxicity
- HP 14 ecotoxic

### 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. Non-contaminated packages may be recycled.

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SEC	TION 14: Transport information	
14.1	UN number or ID number	
	ADRRID	UN 2811
	IMDG-Code	UN 2811
	ICAO-TI	UN 2811
14.2	UN proper shipping name	
	ADRRID	TOXIC SOLID, ORGANIC, N.O.S.
	IMDG-Code	TOXIC SOLID, ORGANIC, N.O.S.
	ICAO-TI	Toxic solid, organic, n.o.s.
	Technical name	Cetylpyridinium chloride monohydrate (CPC)
14.3	Transport hazard class(es)	
	ADRRID	6.1
	IMDG-Code	6.1
	ICAO-TI	6.1
14.4	Packing group	
	ADRRID	II
	IMDG-Code	II
	ICAO-TI	II
14.5	Environmental hazards	hazardous to the aquatic environment
14.6	Special precautions for user	
	Provisions for dangerous goods (ADR) should be c	omplied within the premises.

# 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

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)Additional information				
Proper shipping name	TOXIC SOLID, ORGANIC, N.O.S.			
Particulars in the transport document	UN2811, TOXIC SOLID, ORGANIC, N.O.S., (Cetylpyridinium chloride monohydrate (CPC)), 6.1, II, (D/E), environmentally hazardous			
Classification code	T2			
Danger label(s)	6.1, "Fish and tree"			
Environmental hazards	<b>Yes</b> (hazardous to the aquatic environment)			
Special provisions (SP)	274, 614, 802(ADN)			
Excepted quantities (EQ)	E4			

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1 is the dimension of $100$	F00
Limited quantities (LQ)	500 g
Transport category (TC)	2
Tunnel restriction code (TRC)	D/E
Hazard identification No	60
Emergency Action Code	2X
Regulations concerning the International ( information	Carriage of Dangerous Goods by Rail (RID)Addition
Classification code	T2
Danger label(s)	6.1, "Fish and tree"
Environmental hazards	Yes Hazardous to water
Special provisions (SP)	274, 614, 802(ADN)
Excepted quantities (EQ)	E4
Limited quantities (LQ)	500 g
Transport category (TC)	2
Hazard identification No	60
International Maritime Dangerous Goods (	Code (IMDG) - Additional information
Proper shipping name	TOXIC SOLID, ORGANIC, N.O.S.
Particulars in the shipper's declaration	UN2811, TOXIC SOLID, ORGANIC, N.O.S., (Cetylpyridinium chloride monohydrate (CPC)) 6.1, II, MARINE POLLUTANT
Marine pollutant	<b>Yes</b> (hazardous to the aquatic environment)
Danger label(s)	6.1, "Fish and tree"
Special provisions (SP)	274
Excepted quantities (EQ)	E4
Limited quantities (LQ)	500 g
EmS	F-A, S-A
Stowage category	В
International Civil Aviation Organization (I	CAO-IATA/DGR) - Additional information
Proper shipping name	Toxic solid, organic, n.o.s.
Particulars in the shipper's declaration	UN2811, Toxic solid, organic, n.o.s., (Cetylpyric um chloride monohydrate (CPC)), 6.1, II
Environmental hazards	<b>Yes</b> (hazardous to the aquatic environment)
Danger label(s)	6.1

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Special provisions (SP)	A3, A5
Excepted quantities (EQ)	E4
Limited quantities (LQ)	1 kg

# SECTION 15: Regulatory information

#### Safety, health and environmental regulations/legislation specific for the substance or mixture 15.1 **Relevant provisions of the European Union (EU)**

### **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
H2	acute toxic (cat. 2 + cat. 3, inhal.)	50	200	41)

#### Notation

41) - Category 2, all exposure routes - category 3, inhalation exposure route

### **Deco-Paint Directive**

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

VOC content

0 %

### 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)

List of pollutants (WFD)				
Name of substance	Name acc. to inventory	CAS No	Listed in	Remarks
Cetylpyridinium chloride mono- hydrate (CPC)	Organohalogen compounds and substances which may form such compounds in the aquatic envir- onment		a)	

#### Legend a)

Indicative list of the main pollutants

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

not listed



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### **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

### National regulations(GB)

### List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

not listed

### **Restrictions according to GB REACH, Annex 17**

not listed

### Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

### National inventories

Country	Inventory	Status
AU	AIIC	substance is listed
CN	IECSC	substance is listed
EU	ECSI	substance is listed
JP	CSCL-ENCS	substance is listed
KR	KECI	substance is listed
NZ	NZIoC	substance is listed
PH	PICCS	substance is listed
TW	TCSI	substance is listed
VN	NCI	substance is listed

#### Legend

Australian Inventory of Industrial Chemicals List of Existing and New Chemical Substances (CSCL-ENCS) EC Substance Inventory (EINECS, ELINCS, NLP) Inventory of Existing Chemical Substances Produced or Imported in China Korea Existing Chemicals Inventory National Chemical Inventory New Zealand Inventory of Chemicals Philippine Inventory of Chemicals and Chemical Substances (PICCS) Taiwan Chemical Substance Inventory AIIC CSCL-ENCS ECSI IECSC KECI NCI NZIoC PICCS TCSI

### 15.2 Chemical safety assessment

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



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# **SECTION 16: Other information**

### Indication of changes (revised safety data sheet)

Section Former entry (text/value)		Actual entry (text/value)	
2.2	Labelling of packages where the contents do not exceed 125 ml: Signal word: Danger		yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.3		Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%.	yes
14.8		Regulations concerning the International Car- riage of Dangerous Goods by Rail (RID)Addition- al information	yes
14.8		Classification code: T2	yes
14.8		Danger label(s): 6.1, "Fish and tree"	yes
14.8		Danger label(s): change in the listing (table)	yes
14.8		Environmental hazards: Yes Hazardous to water	yes
14.8		Special provisions (SP): 274, 614, 802(ADN)	yes
14.8		Excepted quantities (EQ): E4	yes
14.8		Limited quantities (LQ): 500 g	yes
14.8		Transport category (TC): 2	yes
14.8		Hazard identification No: 60	yes
15.1	Restrictions according to REACH, Annex XVII		yes
15.1		Dangerous substances with restrictions (REACH, Annex XVII): change in the listing (table)	yes
15.1	List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list: Not listed.		yes
15.1		National regulations(GB)	yes

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Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
15.1		List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list: not listed	yes
15.1		Restrictions according to GB REACH, Annex 17: not listed	yes
15.1		National inventories: change in the listing (table)	yes

### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concern- ing the International Carriage of Dangerous Goods by Road)
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
DGR	Dangerous Goods Regulations (see IATA/DGR)
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identi- fier of substances commercially available within the EU (European Union)
ED	Endocrine disruptor
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-li- cence/)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Na- tions
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
M-factor	Means a multiplying factor. It is applied to the concentration of a substance classified as hazardous to the aquatic environment acute category 1 or chronic category 1, and is used to derive by the summation method the classification of a mixture in which the substance is present
NLP	No-Longer Polymer

acc. to Regulation (EC) No. 1907/2006 (REACH)



### Cetylpyridinium chloride monohydrate (CPC) ≥98 %, for biochemistry

### article number: CN27

Abbr.	Descriptions of used abbreviations
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula- tions concerning the International carriage of Dangerous goods by Rail)
STEL	Short-term exposure limit
TWA	Time-weighted average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

### Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H301	Toxic if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

### Disclaimer

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