

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Cetylpyridinium chloride

Product Number : C0732

Brand : Sigma-Aldrich

Company : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA

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### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

##### OSHA Hazards

Highly toxic by inhalation, Toxic by ingestion, Corrosive

##### Target Organs

Nerves.

##### GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H301 Toxic if swallowed.  
H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H330 Fatal if inhaled.  
H335 May cause respiratory irritation.  
H400 Very toxic to aquatic life.

Precautionary statement(s)

P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/eye protection/face protection.  
P284 Wear respiratory protection.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER or doctor/physician.

#### HMIS Classification

Health hazard: 3  
Flammability: 0  
Physical hazards: 0

#### NFPA Rating

Health hazard: 4  
Fire: 0  
Reactivity Hazard: 0

## Potential Health Effects

<b>Inhalation</b>	May be fatal if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
<b>Skin</b>	May be harmful if absorbed through skin. Causes skin burns. May be fatal if absorbed through skin.
<b>Eyes</b>	Causes eye burns.
<b>Ingestion</b>	Toxic if swallowed. Causes burns.

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms	: Hexadecylpyridinium chloridemonohydrate Cetylpyridinium chloridemonohydrate
Formula	: C <sub>21</sub> H <sub>38</sub> ClN · H <sub>2</sub> O
Molecular Weight	: 358.00 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
<b>Cetylpyridinium chloride monohydrate</b>			
6004-24-6	204-593-9	-	-

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## 4. FIRST AID MEASURES

### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

### If inhaled

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

### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

### In case of eye contact

Continue rinsing eyes during transport to hospital. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

### If swallowed

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

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## 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.

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## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

Wear respiratory protection. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

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## 7. HANDLING AND STORAGE

### Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

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

### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

### Personal protective equipment

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Handle with gloves.

#### Eye protection

Face shield and safety glasses

#### Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

#### Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form flakes

Colour beige

### Safety data

pH 5.0 - 5.4 at 20 °C (68 °F)

Melting point 83 - 86 °C (181 - 187 °F)

Boiling point no data available

Flash point no data available

Ignition temperature no data available

Lower explosion limit no data available

Upper explosion limit no data available

Water solubility soluble

Partition coefficient:  
n-octanol/water log Pow: 1.71

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## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Conditions to avoid

no data available

### Materials to avoid

acids, Acid anhydrides, Acid chlorides, Strong oxidizing agents

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride gas

### Thermal decomposition

234 °C

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## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

LD50 Oral - rat - 200 mg/kg

Inhalation: no data available

### Skin corrosion/irritation

Skin - rabbit - Severe skin irritation

### Serious eye damage/eye irritation

Eyes - rabbit - Severe eye irritation

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Reproductive toxicity

no data available

### Specific target organ toxicity - single exposure (GHS)

Inhalation - May cause respiratory irritation.

### Specific target organ toxicity - repeated exposure (GHS)

no data available

### Aspiration hazard

no data available

### Potential health effects

<b>Inhalation</b>	May be fatal if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
<b>Ingestion</b>	Toxic if swallowed. Causes burns.
<b>Skin</b>	May be harmful if absorbed through skin. Causes skin burns. May be fatal if absorbed through skin.
<b>Eyes</b>	Causes eye burns.

### Signs and Symptoms of Exposure

Cough, Shortness of breath, Headache, Nausea, Vomiting

### Additional Information

RTECS: UU5075000

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## 12. ECOLOGICAL INFORMATION

### Toxicity

Toxicity to fish LC50 - Cyprinus carpio (Carp) - 0.01 mg/l - 96.0 h

**Persistence and degradability**

Biodegradability

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**PBT and vPvB assessment**

no data available

**Other adverse effects**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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**13. DISPOSAL CONSIDERATIONS****Product**

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**

Dispose of as unused product.

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**14. TRANSPORT INFORMATION****DOT (US)**

UN-Number: 2811 Class: 6.1

Packing group: II

Proper shipping name: Toxic solids, organic, n.o.s. (Cetylpyridinium chloride monohydrate)

Marine pollutant: No

Poison Inhalation Hazard: No

**IMDG**

UN-Number: 2811 Class: 6.1

Packing group: II

EMS-No: F-A, S-A

Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Cetylpyridinium chloride monohydrate)

Marine pollutant: No

**IATA**

UN-Number: 2811 Class: 6.1

Packing group: II

Proper shipping name: Toxic solid, organic, n.o.s. (Cetylpyridinium chloride monohydrate)

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**15. REGULATORY INFORMATION****OSHA Hazards**

Highly toxic by inhalation, Toxic by ingestion, Corrosive

**DSL Status**

All components of this product are on the Canadian DSL list.

**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**

Acute Health Hazard

**Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

Cetylpyridinium chloride monohydrate

CAS-No.  
6004-24-6

Revision Date

## New Jersey Right To Know Components

Cetylpyridinium chloride monohydrate

CAS-No.  
6004-24-6

Revision Date

### 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.

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## 16. OTHER INFORMATION

### Further information

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