

SAFETY DATA SHEET

Preparation Date: 04/03/2015

Revision date 4/9/2019

Revision Number: G2

1. IDENTIFICATION

Product identifier

Product code: CE121
Product Name: CETYLPYRIDINIUM CHLORIDE, MONOHYDRATE, USP

Other means of identification

Synonyms: 1-Hexadecylpyridinium chloride, monohydrate; N-Cetylpyridinium chloride, monohydrate
CAS #: 6004-24-6
RTECS # UU5075000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp
 14422 South San Pedro St.
 Gardena, CA 90248
 (310) 516-8000

Order Online At: <https://www.spectrumchemical.com>
Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Tom Tyner (USA - West Coast)
Contact Person: Ibad Tirmiz (USA - East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

| | |
|--|-------------|
| Acute toxicity - Oral | Category 3 |
| Acute toxicity - Inhalation (Dusts/Mists) | Category 2 |
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 2A |
| Specific target organ toxicity (single exposure) | Category 3 |

Label elements

Danger

Hazard statements

Toxic if swallowed
 Fatal if inhaled
 Causes skin irritation

Causes serious eye irritation
May cause respiratory irritation



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wear respiratory protection
Wear protective gloves
Wear eye/face protection

Precautionary Statements - Response

Specific treatment (see .? on this label)

Specific treatment is urgent (see .? on this label)

Specific treatment (see .? on this label)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash it before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. Call a POISON CENTER or doctor/physician if you feel unwell.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Rinse mouth

Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | CAS No | Weight-% |
|---------------------------------------|-----------|----------|
| Cetylpyridinium Chloride, Monohydrate | 6004-24-6 | 100 |

4. FIRST AID MEASURES

First aid measures

- General Advice:** National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.
- Skin Contact:** Wash off immediately with soap and plenty of water. Continue flushing with plenty of water for at least 15 minutes. Remove all contaminated clothes and shoes. Immediate medical attention is required. Call a physician or Poison Control Centre immediately.
- Eye Contact:** Flush eyes with water for 15 minutes. Get medical attention. If symptoms persist, call a physician.
- Inhalation:** Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. **WARNING!** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.
- Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Immediate medical attention is required. Toxic if swallowed.

Most important symptoms and effects, both acute and delayed

- Symptoms**
- Causes eye irritation
 - Moderate eye irritation
 - Eye contact may result in redness or pain
 - Causes skin irritation
 - Moderate skin irritation
 - Skin contact may result in redness, pain, inflammation, itching, scaling
 - Irritating to respiratory system
 - May cause hypermotility, diarrhea
 - Dyspnea (Difficulty breathing and shortness of breath)

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Carbon dioxide (CO₂). Dry chemical. Water spray mist or foam.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous combustion products Carbon oxides, Nitrogen oxides; Hydrogen chloride gas

Hazardous combustion products Carbon Monoxide, Carbon Dioxide. Nitrogen oxides (NO_x). hydrogen chloride gas.

Specific hazards May be combustible at high temperatures.

Special Protective Actions for Firefighters

Specific Methods: No information available

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Remove all sources of ignition.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe dust. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:

Acids
Acid anhydrides
Acid chlorides
Oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

| Component | CAS No | OSHA | NIOSH | ACGIH | AIHA WEEL |
|---------------------------------------|-----------|------|-------|-------|-----------|
| Cetylpyridinium Chloride, Monohydrate | 6004-24-6 | None | None | None | None |

Canada

| Component | CAS No | Canada - Alberta | Canada - British Columbia | Canada - Ontario | Canada - Quebec |
|---------------------------------------|-----------|------------------|---------------------------|------------------|-----------------|
| Cetylpyridinium Chloride, Monohydrate | 6004-24-6 | None | None | None | None |

Australia and Mexico

| Component | CAS No | Australia | Mexico |
|---------------------------------------|-----------|-----------|--------|
| Cetylpyridinium Chloride, Monohydrate | 6004-24-6 | None | None |

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

- Eye protection:** Goggles or Safety glasses with side-shields.
- Skin and body protection:** Chemical resistant apron
Gloves
Long sleeved clothing
- Respiratory protection:** Effective dust mask. or. Wear respirator with dust filter. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds) , inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.
- Hygiene measures:** Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Solid

Appearance:

Powder.

Color:

White.

Odor:

No information available.

Taste

No information available.

Formula

C₂₁H₃₈NCI•H₂O

Molecular/Formula weight (g/mole):

358.00

Flammability (solid, gas)

no data available

Flashpoint (°C/°F):

No information available

Flash Point Tested according to:

Autoignition Temperature (°C/°F):

Product code: CE121

Product name: CETYLPYRIDINIUM
CHLORIDE, MONOHYDRATE, USP

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| | | |
|--|--|--|
| Not available | No information available | Lower Explosion Limit (%): No information available |
| Upper Explosion Limit (%): No information available | Melting point/range(°C/°F): 77°-84°C/170.6°-183.2°F | Decomposition temperature(°C/°F): No information available |
| Boiling point/range(°C/°F): No information available | Bulk density: No information available | Density (g/cm3): No information available |
| Specific gravity: No information available | pH No information available | Vapor pressure @ 20°C (kPa): No information available |
| Evaporation rate: No information available | Vapor density: No information available | VOC content (g/L): No information available |
| Odor threshold (ppm): No information available | Partition coefficient (n-octanol/water): 1.7 | Viscosity: No information available |
| Miscibility: No information available | Solubility: Very soluble in water Freely soluble in alcohol Freely soluble in Chloroform Very slightly soluble in Ether Very slightly soluble in benzene | |

10. STABILITY AND REACTIVITY

Reactivity

Reactive with acids
Reactive with oxidizing agents

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Avoid dust formation. Incompatible materials.

Incompatible Materials: Acids
Acid anhydrides
Acid chlorides
Oxidizing agents

Hazardous decomposition products: Carbon oxides. Nitrogen oxides (NOx). Hydrogen chloride gas.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:

Ingestion. Inhalation.

Acute Toxicity**Component Information**

| | |
|---------------------------------------|-----------|
| Cetylpyridinium Chloride, Monohydrate | |
| CAS No | 6004-24-6 |

LD50/oral/rat = No information available**LD50/oral/mouse** = No information available**LD50/dermal/rabbit** = No information available**LD50/dermal/rat** = No information available**LC50/inhalation/rat** = No information available**LC50/inhalation/mouse** = No information available**Other LD50 or LC50 information** = 200 mg/kg LD50 oral Rat (for anhydrous form, CAS number 123-03-5)

108 mg/kg LD50 oral Mouse (for anhydrous form, CAS number 123-03-5)

400 mg/kg LD50 oral Rabbit (for anhydrous form, CAS number 123-03-5)

90 mg/m³ LC50 inhalation Rat (for anhydrous form, CAS number 123-03-5)**Product Information****LD50/oral/rat** =**Value - Acute Tox** = No information available**LD50/oral/mouse** =**Value - Acute Tox Oral** = No information available**LD50/dermal/rabbit****Value - Acute Tox** = No information available**LD50/dermal/rat****VALUE - Acute Tox Dermal** = No information available**LC50/inhalation/rat****VALUE-Vapor** = No information available**VALUE-Gas** = No information available**VALUE-Dust/Mist** = No information available**LC50/Inhalation/mouse****VALUE-Vapor** = No information available**VALUE - Gas** = No information available**VALUE - Dust/Mist** = No information available**Symptoms****Skin Contact:** Causes skin irritation.**Eye Contact:** Causes serious eye irritation.**Inhalation** Fatal if inhaled. Irritating to respiratory system. May cause dyspnea (difficulty breathing or shortness of breath). Symptoms may including coughing.**Ingestion** Toxic if swallowed. Can cause hypermotility, diarrhea. It may affect behavior/central nervous system/nervous system (somnolence, convulsions).

Aspiration hazard No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity No information available.

Sensitization: No information available.

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic.

| Component | CAS No | IARC | ACGIH - Carcinogens | NTP | OSHA HCS - Carcinogens | Australia - Notifiable Carcinogenic Substances | Australia - Prohibited Carcinogenic Substances |
|---------------------------------------|-----------|------------|---------------------|------------|------------------------|--|--|
| Cetylpyridinium Chloride, Monohydrate | 6004-24-6 | Not listed | Not listed | Not listed | Not listed | Not listed | Not listed |

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity No data is available

Reproductive Effects: No information available

Developmental Effects: No information available

Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target Organs: No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility in soil No information available

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

| Component | CAS No | RCRA - F Series Wastes | RCRA - K Series Wastes | RCRA - P Series Wastes | RCRA - U Series Wastes |
|---------------------------------------|-----------|------------------------|------------------------|------------------------|------------------------|
| Cetylpyridinium Chloride, Monohydrate | 6004-24-6 | None | None | None | None |

14. TRANSPORT INFORMATION**DOT**

UN-No: Not Regulated
Proper Shipping Name: Toxic solids, organic, n.o.s. (cetylpyridinium chloride)
Hazard Class 6.1
Subsidiary Class No information available
Packing group: No information available
Emergency Response Guide Number No information available
Marine Pollutant No data available
DOT RQ (lbs): No information available
Special Provisions No Information available
Symbol(s): [DOT]: (G) - Identifies proper shipping names for which one or more technical names of the hazardous material must be entered in parentheses, in association with the basic description.
Description: UN2811, Toxic solids, organic, n.o.s. ,6.1,PG II

TDG (Canada)

UN-No: UN2811
Proper Shipping Name: Toxic solid, organic, n.o.s.
Hazard Class 6.1
Subsidiary Risk: No information available
Packing Group: II
Marine Pollutant No Information available
Description: UN2811, TOXIC SOLID, ORGANIC, N.O.S.,6.1,PG II

ADR

UN Number UN2811
Proper Shipping Name: Toxic solid, organic, n.o.s.
Transport hazard class(es) 6.1
Packing group II
Subsidiary Risk: No information available
Description: UN2811 Toxic solid, organic, n.o.s.,6.1,II

IMDG

UN-No: UN2811
Proper Shipping Name: Toxic solid, organic, n.o.s.
Hazard Class: 6.1
Subsidiary Risk: No information available
Packing Group: II
Marine Pollutant No information available
EMS: F-A

RID

UN Number UN2811

Proper Shipping Name: Toxic solid, organic, n.o.s.
Transport hazard class(es) 6.1
Subsidiary Risk: No information available
Packing group II
Description: UN2811 Toxic solid, organic, n.o.s.,6.1,II

ICAO (air)

UN-No: UN2811
Proper Shipping Name: Toxic solid, organic, n.o.s.
Hazard Class 6.1
Subsidiary Risk: No information available
Packing Group: II
Description: UN2811,Toxic solid, organic, n.o.s.,6.1,PG II

IATA

UN Number UN2811
Proper Shipping Name: Toxic solid, organic, n.o.s.
Transport hazard class(es) 6.1
Subsidiary Risk: No information available
Packing group II
Precautionary Statements - Response 6L
Special Provisions No information available
Description: UN2811,Toxic solid, organic, n.o.s.,6.1,PG II

15. REGULATORY INFORMATION

International Inventories

| Component | CAS No | U.S. TSCA | KOREA KECL | Philippines (PICCS) | Japan ENCS | China IECSC | Australia (AICS) | EINECS-No. |
|---------------------------------------|-----------|--|-------------|---------------------|------------------|-------------|------------------|-------------|
| Cetylpyridinium Chloride, Monohydrate | 6004-24-6 | Not listed. It is exempt from listing on the TSCA 8(b)Inventory since it is a hydrate. However, the anhydrous form (CAS no. 123-03-5) is listed as ACTIVE on the TSCA 8(b) Inventory | Not present | Present | Present (5)-3686 | Present | Present | Not present |

U.S. Regulations

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

WARNING: This product contains a chemical known to the State of California to cause cancer. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm (See table below)

| Component | CAS No | Carcinogen | Developmental Toxicity | Male Reproductive Toxicity | Female Reproductive Toxicity: |
|---------------------------------------|-----------|------------|------------------------|----------------------------|-------------------------------|
| Cetylpyridinium Chloride, Monohydrate | 6004-24-6 | Not Listed | Not Listed | Not Listed | Not Listed |

CERCLA/SARA

| Component | CAS No | CERCLA - Hazardous Substances and their Reportable Quantities | Section 302 Extremely Hazardous Substances and TPQs | Section 302 Extremely Hazardous Substances and RQs | Section 313 - Chemical Category | Section 313 - Reporting de minimis |
|---------------------------------------|-----------|---|---|--|---------------------------------|------------------------------------|
| Cetylpyridinium Chloride, Monohydrate | 6004-24-6 | None | None | None | None | None |

U.S. TSCA

| Component | CAS No | TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS) | TSCA 8(d) -Health and Safety Reporting |
|---------------------------------------|-----------|---|--|
| Cetylpyridinium Chloride, Monohydrate | 6004-24-6 | Not Applicable | Not Applicable |

Canada

WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

The WHMIS 2015 classification of this product has not been validated or reviewed yet.

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

DSL/NDSL

| Component | CAS No | Canada (DSL) | Canada (NDSL) |
|---------------------------------------|-----------|--------------|---------------|
| Cetylpyridinium Chloride, Monohydrate | 6004-24-6 | Not Listed | Not Listed |

| Component | CAS No | CEPA Schedule I - Toxic Substances |
|---------------------------------------|-----------|---|
| Cetylpyridinium Chloride, Monohydrate | 6004-24-6 | Not listed |
| Component | CAS No | CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting |
| Cetylpyridinium Chloride, Monohydrate | 6004-24-6 | Not listed |

EU Classification

EU GHS - SV - CLP 1272/2008

| Component | CAS No | EU GHS - SV - CLP (1272/2008) |
|---------------------------------------|-----------|---|
| Cetylpyridinium Chloride, Monohydrate | 6004-24-6 | Acute Tox. 3 (H301); Acute Tox. 2 (H330); Skin Irrit. 2; Eye Dam. 1(H318); STOT SE 3 (H335); Aquatic Acute 1 (H400); Aquatic Chronic 1 (H410) |

EU - CLP (1272/2008)

R-phrases(s)

R25 - Toxic if swallowed

Product code: CE121

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R26 - Very toxic by inhalation
R38 - Irritating to skin
R41 - Risk of serious damage to eyes
R37 - Irritating to respiratory system

S -phrase(s)

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection

| Component | CAS No | Classification | Concentration Limits: | Safety Phrases |
|---------------------------------------|-----------|----------------|-----------------------|----------------|
| Cetylpyridinium Chloride, Monohydrate | 6004-24-6 | | No information | |

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

T - Toxic
Xi - Irritant



16. OTHER INFORMATION

Preparation Date: 04/03/2015
Revision date 4/9/2019
Prepared by: Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet