



SAFETY DATA SHEET

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

1.1. Product identifier Cetylpyridinium Chloride in Propylene Glycol

Synonyms: CPC PG USP; FRESHSTAT™

Chemical Abstracts Registry No: Mixture - see Section 3

REACH Registration Number: Not applicable.

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

personal care

1.3. Details of the supplier of the safety data sheet

Vertellus Health & Specialty Products LLC 215 North Centennial Street Zeeland, MI 49464-1309 USA 1-800-223-0453

<u>e-mail Address:</u> sds@vertellus.com

1.4. Emergency telephone number Vertellus: 1-800-223-0453

<u>CHEMTREC (USA):</u> 1-800-424-9300 (collect calls accepted) CHEMTREC (International): 1-703-527-3887 (collect calls accepted)

NRCC (China): +86 532 83889090

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture (According to Regulation (EC) No 1272/2008, 29 CFR 1910.1200 and the Globally Harmonized System)

Acute Toxicity Oral Category 4 Serious Eye Damage Category 1 Skin Irritation Category 2 Environmental Acute Category 1

2.2. Label elements

Hazard Symbols (Pictogram):





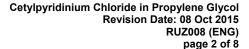


Signal Word: Danger

Hazard Precautions: H302 - Harmful if swallowed.

H318 - Causes serious eye damage. H315 - Causes skin irritation. H400 - Very toxic to aquatic life.

^{*}Trademark owned by or licensed to the Vertellus group of companies, registered in the United States or elsewhere.





SAFETY DATA SHEET

Prevention Precautionary Statements: P270 - Do not eat, drink or smoke when using this product.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

First Aid Precautionary Statements: P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

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. P362 - Take off contaminated clothing and wash before reuse.

P391 - Collect spillage.

SECTION 3: Composition/information on ingredients

3.1. Substances or 3.2. Mixtures

Ingredient	CAS Number	Concentration (weight %)	EC Number	CLP Inventory/ Annex VI	EU CLP Classification (1272/2008)
Cetylpyridinium Chloride Monohydrate	6004-24-6	15-40	204-593-9	Not listed	Acute Tox. 4; H302 Eye Dam. 1; H318 Skin Irrit. 2; H315 Aquatic Acute 1; H400
Propylene Glycol	57-55-6	40-70	200-338-0	Not listed	Not classified as hazardous

NOTE: See Section 8 for exposure limit data for these ingredients. See Section 15 for trade secret information (where applicable). See Section 16 for the full text of the R-phrases above.

SECTION 4: First aid measures

4.1. Description of first aid measures

Skin Contact: Wash thoroughly after skin contact. The exposed area should be examined by medical personnel if

irritation or pain persists after the area has been washed.

Eye Contact: Immediately flush eyes with plenty of water for at least 20 minutes. Get immediate medical attention.

Hold eyelids apart periodically while flushing.

Inhalation: Remove from exposure. If not breathing, give artificial respiration and call a physician.

Ingestion: If swallowed, contact physician or poison control center immediately.

4.2 Most important symptoms and effects, both acute and delayed

Acute: Direct contact with the eyes may cause severe irritation. Can cause skin irritation. Harmful if swallowed.

Expected to cause gastrointestinal tract irritation with nausea and vomiting.

Delayed Effects: None known.

4.3. Indication of any immediate medical attention and special treatment needed

Note to Physician: No specific indications. Treatment should be based on the judgment of the physician in response to the

reactions of the patient.

^{*}Trademark owned by or licensed to the Vertellus group of companies, registered in the United States or elsewhere.

page 3 of 8



SAFETY DATA SHEET

SECTION 5: Firefighting measures

5.1. Extinguishing media

Appropriate Extinguishing

Water spray, foam, alcohol foam, carbon dioxide, dry chemical.

Media:

5.2. Special hazards arising from the substance or mixture

Hazardous Products of

Combustion will produce carbon monoxide, carbon dioxide and oxides of nitrogen. Combustion:

Potential for Dust Explosion:

Not applicable.

5.3. Advice for firefighters

Basic Fire Fighting Guidance: Wear self-contained breathing apparatus and full protective clothing (i.e., Bunker gear). Skin and

eye contact should be avoided. Normal fire fighting procedures may be used.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuation Procedures: Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2. Environmental precautions

Prevent releases to soils, drains, sewers and waterways.

6.3. Methods and material for containment and cleaning up

Remove all ignition sources. Ventilate the area of spill or leak. Wear protective equipment during clean-up. Contain spilled liquid with sand or vermiculite and place in chemical waste container. Prevent runoff from entering drains, sewers, and streams. After collection of material. flush area with water. Dispose of contents & container in accordance with local, regional, national or international regulations.

6.4. Reference to other sections

Refer to section 8 for information on selecting personal protective equipment. Refer to section 13 for information on spilled product, absorbent and clean up material disposal instructions.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Practices to Minimize Risk: Wear appropriate protective equipment when performing maintenance on contaminated equipment.

Wash hands thoroughly before eating or smoking after handling this material. Do not eat, drink or smoke in work areas. Prevent contact with incompatible materials. Avoid spills and keep away from

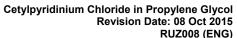
drains. Handle in a manner to prevent generation of aerosols, vapors or dust clouds.

7.2. Conditions for safe storage, including any incompatibilities

Storage Precautions & Recommendations:

This product should be stored at ambient temperature in a dry, well-ventilated location. Protect containers against physical damage. Keep away from heat, sparks, and flame. Should be

periodically inspected.



page 4 of 8



SAFETY DATA SHEET

Dangerous Incompatibility

Strong oxidizing agents. Strong acids.

Reactions:

Incompatibilities with Materials

None known

of Construction:

7.3. Specific end use(s)

If a chemical safety assessment has been completed an exposure scenario is attached as an annex to this Safety Data Sheet. Refer to this annex for the specific exposure scenario control parameters for uses identified in subsection 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Country Occupational Exposure Limit

Australia, Ireland, New Zealand, United Kingdom

Propylene Glycol: 150 ppm as an 8-hour time-weighted average

Canada - Ontario Propylene Glycol: 50 ppm as an 8-hour time-weighted average

Air Monitoring Method: Gravimetric analysis for total particulate and respirable fraction (<10 microns).

8.2. Exposure controls

Also see the annex to this SDS (if applicable) for specific exposure scenario controls.

Other Engineering Controls: All operations should be conducted in well-ventilated conditions. Local exhaust ventilation should be

provided.

Personal Protective Equipment: Wear chemical safety goggles. Where splashing, misting or contact with eyes is likely, wear a face

shield. Wear impervious gloves made of nitrile, neoprene or latex. Where overexposures are a concern,

use NIOSH-approved dust/mist respirator as necessary.

Respirator Caution: Observe OSHA regulations for respirator use (29 CFR 1910.134). Air-purifying respirators must not be

used in oxygen-deficient atmospheres.

Thermal Hazards: Not applicable.

Environmental Exposure

Controls:

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. If user operations

generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or

statutory limits.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance, State & Odor (ambient temperature):

Viscous liquid with little to no odor

Molecular Formula:

Mixture Molecular Weight: Mixture

Vapor Pressure:No data available.Evaporation Rate:No data available.Specific Gravity or Density:0.9923Vapor Density (air = 1):No data available.

^{*}Trademark owned by or licensed to the Vertellus group of companies, registered in the United States or elsewhere.

page 5 of 8



SAFETY DATA SHEET

Boiling Point: No data available. Freezing / Melting Point: No data available. Solubility in Water: Soluble Octanol / Water Coefficient: No data available. No data available. pH: Odor Threshold: No data available. Viscosity: No data available. **Autoignition Temperature:** No data available. Flash Point and Method: 219°F (104°C) Estimated Flammable Limits: No data available. Flammability (solid, gas): Not applicable. **Decomposition Temperature:** No data available. **Explosive Properties: Oxidizing Properties:** Not an oxidizer. Not explosive.

SECTION 10: Stability and reactivity

<u>10.1. Reactivity</u> Not classified as dangerously reactive.

10.2. Chemical stability Stable under normal conditions.

10.3. Possibility of hazardous

reactions

Polymerization is not expected to occur

10.4. Conditions to avoidAvoid incompatible materials and excessive heat.

10.5. Incompatible materials Strong oxidizing agents; Strong acids.

10.6. Hazardous decomposition

products

Products of incomplete combustion may include CO, CO2, NOx, and dense smoke.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute Oral LD₅₀: LD₅₀ (rat) = 560 mg/kg Cetylpyridinium Chloride Monohydrate

 LD_{50} (rat) = 22,000 mg/kg Propylene Glycol

Acute Dermal LD₅₀: LD₅₀ (rabbit) > 5000 mg/kg Cetylpyridinium Chloride Monohydrate

LD₅₀ (rabbit) > 2000 mg/kg Propylene Glycol

Acute Inhalation LC₅₀: LC_{50} (4h) (rat) = 0.05 - 0.51 mg/L Cetylpyridinium Chloride Monohydrate (aerosolized)

 LC_{50} (2h) (rabbit) > 317042 mg/m³ Propylene Glycol

Skin Irritation: Mildly to moderately irritating to skin.

Eye Irritation: Severely irritating to eyes.

Skin Sensitization: Negative for sensitizing effects in guinea pig maximization test.

Mutagenicity: No evidence of mutagenic effects

Reproductive / Developmental

Toxicity:

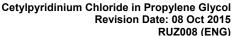
No evidence of reproductive effects No evidence of teratogenic effects

Carcinogenicity: This material is not listed by IARC, NTP or OSHA as a carcinogen. No test data is available that

indicates this material is a carcinogen.

Target Organs: None known

^{*}Trademark owned by or licensed to the Vertellus group of companies, registered in the United States or elsewhere.



page 6 of 8



SAFETY DATA SHEET

Aspiration Hazard: Based on physical properties, not likely to be an aspiration hazard.

Primary Route(s) of Exposure: Skin contact and absorption, eye contact, and inhalation. Ingestion is not likely to be a primary route of

exposure.

Most important symptoms and effects, both acute and delayed Direct contact with the eyes may cause severe irritation. Can cause skin irritation. Harmful if swallowed. Expected to cause gastrointestinal tract irritation with nausea and vomiting. Delayed Effects: None

known.

Additive or Synergistic effects: None known.

SECTION 12: Ecological information

LC₅₀ (96h) Oncorhynchus mykiss = 0.16 mg/L Cetylpyridinium Chloride 12.1. Toxicity

EC₅₀ (48h) *Daphnia magna* = 9.18 μg/L Cetylpyridinium Chloride. EC₅₀ (72h) Pseudokirchneriella subcapitata = 26.9 µg/L Cetylpyridinium Chloride .

 LC_{50} (96h) Fish = 40,613 mg/L

Propylene Glycol EC₅₀ (96h) *Daphnia magna* = 18,800 mg/L Propylene Glycol. EC₅₀ (48h) Pseudokirchneriella subcapitata = 34,100 mg/L Propylene Glycol .

No data available. 12.2. Persistence and

degradability

No data available. 12.3. Bioaccumulative potential

12.4. Mobility in soil No data available.

12.5. Results of PBT and vPvB

assessment

This substance is not a PBT or vPvB.

Cetylpyridinium Chloride was found to be rapidly biodegradable, but not meeting the definition of "ready 12.6. Other adverse effects

biodegradable". Propylene Glycol has been determined to be ready biodegradable. No data is available

for the mixture.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

US EPA Waste Number: Non-Hazardous

Waste Classification: (per US

regulations)

The waste may be classified as "special" or hazardous per State regulations.

Waste Disposal: NOTE: Generator is responsible for proper waste characterization. State hazardous waste regulations may differ substantially from federal regulations. Dispose of this material responsibly, and in accordance

with standard practice for disposal of potentially hazardous materials as required by applicable

international, national, regional, state or local laws, and environmental protection duty of care principles. Do NOT dump into any sewers, on the ground, or into any body of water. For disposal within the EC, the appropriate classification code according to the European Community List of Wastes should be used.

Note that disposal regulations may also apply to empty containers and equipment rinsates.

^{*}Trademark owned by or licensed to the Vertellus group of companies, registered in the United States or elsewhere.

page 7 of 8



SAFETY DATA SHEET

SECTION 14: Transport information

The following information applies to all shipping modes (DOT/IATA/ICAO/IMDG/ADR/RID/ADN), unless otherwise indicated:

14.1. UN number UN3082 14.2. UN proper shipping Environmentally Hazardous Substance,

name

Environmentally Hazardous Substance, Liquid, n.o.s. (Cetylpyridinium Chloride in Propylene Glycol)

14.3. Transport hazard class(es) 9 14.4. Packing group PG III

14.5. Environmental hazards Marine Pollutant

NA Emergency Guidebook Numbers: 171 IMDG EMS: S-F; F-A

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Consult applicable regulations for bulk marine

shipments.

SECTION 15: Regulatory information

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

Chemical Inventory Lists: Status:

USA TSCA: Listed **EINECS**: Listed (204-593-9; 200-338-0)

Canada(DSL/NDSL): Listed (DSL) Japan: Listed (5-3686; 2-234)

Korea:Listed (99-3-1228; KE-29267)Australia:ListedChina:ListedPhilippines:ListedTaiwan:ListedNew Zealand:Listed

German Water Hazard

Classification:

WGK 3 (self-classification)

SARA 313: Not applicable.

Reportable Quantities: Not applicable.

State Regulations: Not applicable.

Other Regulatory Listings: This product may be considered a "dangerous substance" per Annex I of the Seveso III Directive in the

European Union (Directive 2012/18/EU). European handlers of this product are encouraged to review the

Directive to determine its applicability to their operations.

HMIS IV:



NFPA:



15.2. Chemical safety assessment

A chemical safety assessment has not been prepared for this mixture of substances.

SECTION 16: Other information

Classification Method: On basis of test data; Expert judgment



Cetylpyridinium Chloride in Propylene Glycol Revision Date: 08 Oct 2015 RUZ008 (ENG)

page 8 of 8

SAFETY DATA SHEET

Legend of Abbreviations:

ACGIH = American Conference on Governmental Industrial Hygienists.

CAS = Chemical Abstracts Service.

CFR = Code of Federal Regulations.

DSL/NDSL = Domestic Substances List/Non-Domestic Substances List.

EC = European Community.

EINECS = European Inventory of Existing Commercial Chemical Substances.

ELINCS = European List of Notified Chemical Substances.

EU = European Union.

GHS = Globally Harmonized System.

LC = Lethal Concentration.

LD = Lethal Dose.

NFPA = National Fire Protection Association.

NIOSH = National Institute of Occupational Safety and Health.

NTP = National Toxicology Program.

OSHA = Occupational Safety and Health Administration

PEL = Permissible Exposure Limit.

RQ = Reportable Quantity.

SARA = Superfund Amendments and Reauthorization Act of 1986.

TLV = Threshold Limit Value.

WHMIS = Workplace Hazardous Materials Information System.

Important Note: Please note that the information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. The information contained herein may change without prior notice. THIS SAFETY DATA SHEET SUPERSEDES ALL PREVIOUS EDITIONS.

Revision Date: 08 Oct 2015 Original Date of Issue: 15 November 1999

Issued by: Regulatory Management Department Email: SDS@Vertellus.com

Revision Details: Revised all sections to GHS format.