

# 1. IDENTIFICATION

Product Name Cetrimonium Chloride 50%
Other Names Cetyltrimethylammonium chloride

**Uses** Surfactant.

Chemical Family No Data Available
Chemical Formula Unspecified

Chemical Name Hexadecyltrimethylammonium chloride

Product Description No Data Available

# **Contact Details of the Supplier of this Safety Data Sheet**

Organisation	Location	Telephone
Aurora Cleaning Supplies	F1 / 5 Bungaleen Court Dandenong South VIC 3175	03 9768 2669

# **Emergency Contact Details**

For emergencies only; DO NOT contact these companies for general product advice.

Organisation	Location	Telephone
Poisons Information Centre	Westmead NSW	
		131126
Chemcall	Australia	1800-127406
		+64-4-9179888
Chemcall	Malaysia	+64-4-9179888
Chemcall	New Zealand	0800-243622
Chemicali	New Zealand	+64-4-9179888
National Poisons Centre	New Zealand	0800-764766
CHEMTREC	USA & Canada	1-800-424-9300 CN723420
		+1-703-527-3887

# 2. HAZARD IDENTIFICATION

Poisons Schedule (Aust)

Schedule 6

#### **Globally Harmonised System**

Hazard Classification Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of

Chemicals (GHS)

Hazard Categories Acute Toxicity (Oral) - Category 4

Skin Corrosion/Irritation - Category 1C Serious Eye Damage/Irritation - Category 1

Acute Hazard To The Aquatic Environment - Category 1
Long-term Hazard To The Aquatic Environment - Category 1

**Pictograms** 







Signal Word Danger

Hazard Statements H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements Prevention P260 Do not breathe mist/vapour/spray.

**P273** Avoid release to the environment.

**P270** Do not eat, drink or smoke when using this product.

**P280** Wear protective gloves/protective clothing/eye protection/face protection and

suitable respirator.

Response P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water or shower.

P310 Immediately call a POISON CENTER or doctor.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

**P363** Wash contaminated clothing before reuse.

**P391** Collect spillage.

**P304 + P340** IF INHALED: Remove victim to fresh air and keep comfortable for breathing.

Storage **P405** Store locked up

Disposal **P501** Dispose of contents/container in accordance with local / regional / national /

international regulations.

#### **National Transport Commission (Australia)**

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by

Road & Rail (ADG Code)

#### Safe Work Australia

National Guide for Classifying Hazardous Chemicals under the Model WHS Regulations

Hazard Classification Hazardous according to the criteria of Safe Work Australia under Model WHS Regulations

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Cetyltrimethylammonium chloride	Unspecified	112-02-7	48 - 52 %
Water	H2O	7732-18-5	48 - 52 %

#### 4. FIRST AID MEASURES

### Description of necessary measures according to routes of exposure

Swallowed IF SWALLOWED: Rinse mouth with water. Do NOT induce vomiting. Immediately call a Poison Centre or doctor/physician

for advice. Never give anything by mouth to an unconscious person.

Eye IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting

the upper and lower lids. Remove contact lenses if present and easy to do. Continue flushing until advised to stop by a Poisons Information Centre (e.g., phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor, or for at least 15

minutes.

Skin IF ON SKIN (or hair): Remove and isolate contaminated clothing and shoes. Immediately wash skin and hair with plenty of

soap and running water for at least 15 minutes. Immediate call a Poison Centre or doctor/physician for advice. Wash

contaminated clothing and shoes before reuse.

\*For minor skin contact, avoid spreading material on unaffected skin.

Inhaled IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a Poison

Centre or doctor/physician for advice. Give artificial respiration if victim is not breathing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with

a one-way valve or other proper respiratory medical device. Administer oxygen if breathing is difficult.

Advice to Doctor For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

Keep victim calm and warm. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

\*Most important symptoms and effects, both acute and delayed: Harmful if swallowed. Causes severe skin burns and eye

damage.

Medical Conditions Aggravated by No information available.

**Exposure** 

#### **5. FIRE FIGHTING MEASURES**

General Measures Move containers from fire area if you can do it without risk. Cool containers with water spray until well after fire is out.

Dike fire-control water for later disposal; do not scatter the material.

Flammability Conditions Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic

fumes.

Extinguishing Media If material is involved in a fire, use dry chemical, Carbon dioxide (CO2), alcohol-resistant foam or water spray for

extinction.

Chloride gas.

Fire and Explosion Hazard Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated.

Hazardous Products of

Combustion

Special Fire Fighting Instructions

Fire may produce irritating, corrosive and/or toxic gases, including Carbon oxides, Nitrogen oxides (NOx), Hydrogen

Contain runoff from fire control or dilution water - Runoff may be corrosive and/or toxic and cause pollution.

Personal Protective Equipment Wear positive pressure self-contained breathing apparatus (SCBA). Wear chemical protective clothing - It ma

Wear positive pressure self-contained breathing apparatus (SCBA). Wear chemical protective clothing - It may provide little or no thermal protection. Structural firefighters' protective clothing provides limited protection in fire situations

ONLY; it is not effective in spill situations where direct contact with the substance is possible.

Flash Point No Data Available

 Lower Explosion Limit
 No
 Data
 Available

 Upper Explosion Limit
 No
 Data
 Available

 Auto Ignition Temperature
 No
 Data
 Available

 Hazchem Code
 2X

## **6. ACCIDENTAL RELEASE MEASURES**

General Response Procedure Ensure adequate ventilation - Ventilate enclosed areas before entering. ELIMINATE all ignition sources (no smoking,

flares, sparks or flames in immediate area). Do not breathe mist/vapours and prevent contact with eyes, skin and clothing.

Clean Up Procedures Absorb or cover with dry earth, sand or other non-combustible material and transfer to suitable, closed containers for

disposal (see SECTION 13).

**Containment** Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas.

\*Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

**Decontamination** No information available.

**Environmental Precautionary** 

Measures

Spillages and decontamination runoff should be prevented from entering drains and watercourses.

Evacuation Criteria Immediately isolate spill or leak area. Evacuate personnel to safe areas. Keep unauthorised personnel away. Stay upwind

and/or uphill.

Personal Precautionary Measures Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (see SECTION 8).

\*Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill

situations where direct contact with the substance is possible.

#### 7. HANDLING AND STORAGE

**Handling** Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure

adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Do not breathe mist/vapours and prevent contact with eyes, skin and clothing. Do not ingest. Wear protective gloves/protective clothing/eye protection/face protection and suitable respirator (see SECTION 8). Keep away from heat and sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. Avoid release to the environment -

Collect spillage (see SECTION 6).

Storage Store in a cool, dry and well-ventilated place. Avoid extremes of temperature and direct sunlight. Keep container tightly

closed. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep away from heat and sources of ignition - No smoking. Keep away from incompatible materials (see SECTION 10). Store locked up.

**Container** Keep in the original container.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**General** No specific exposure standards are available for this product.

Exposure Limits No Data Available

Biological Limits No information available.

Engineering Measures A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust

ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing

dispersion of it into the general work area.

Personal Protection Equipment - Respiratory protection: Wear suitable respirator. Recommended: Use a full-face supplied air respirator (refer to AS/NZS 1715 & 1716).

- Eye/face protection: Wear appropriate eye protection to prevent eye contact. Recommended: Wear chemical goggles.

- Hand protection: Wear protective gloves. Recommended: Wear impervious chemical-resistant gloves.

- Skin/body protection: Wear appropriate personal protective clothing to prevent skin contact. Recommended: Protective

work clothing.

**Special Hazards Precaustions** 

No information available.

**Work Hygienic Practices** 

Do not eat, drink or smoke when using this product. Wash hands before breaks and at the end of workday. Take off

immediately all contaminated clothing. Wash contaminated clothing before reuse.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State** Liquid

**Appearance** Transparent liquid

Odour No information available. Colour Colourless to light yellow 4.0 - 9.0 (10% water solution)

рΗ No Data Available **Vapour Pressure Relative Vapour Density** No Data Available **Boiling Point** No Data Available **Melting Point** No Data Available **Freezing Point** No Data Available Solubility No Data Available **Specific Gravity** No Data Available **Flash Point** No Data Available **Auto Ignition Temp** No Data Available **Evaporation Rate** No Data Available **Bulk Density** No Data Available **Corrosion Rate** No Data Available **Decomposition Temperature** No Data Available Density No Data Available **Specific Heat** No Data Available **Molecular Weight** No Data Available **Net Propellant Weight** No Data Available No Data Available No Data Available

**Octanol Water Coefficient Particle Size Partition Coefficient** No Data Available **Saturated Vapour Concentration** No Data Available **Vapour Temperature** No Data Available Viscosity No Data Available **Volatile Percent** No Data Available

**Additional Characteristics** No information available.

**Potential for Dust Explosion** Not applicable.

**Fast or Intensely Burning** 

Characteristics

**VOC Volume** 

No information available.

No Data Available

No information available.

Flame Propagation or Burning **Rate of Solid Materials Non-Flammables That Could** 

No information available.

Contribute Unusual Hazards to a

**Fire** 

Properties That May Initiate or Contribute to Fire Intensity

Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic

fumes.

Reactions That Release Gases or

**Vapours** 

Fire/decomposition may produce irritating, corrosive and/or toxic gases, including Carbon oxides, Nitrogen oxides (NOx),

Hydrogen Chloride gas.

Release of Invisible Flammable

Vapours and Gases

Contact with metals may evolve flammable hydrogen gas.

#### 10. STABILITY AND REACTIVITY

General InformationNo information available.Chemical StabilityStable under normal conditions.

**Conditions to Avoid** Avoid extremes of temperature and direct sunlight.

Materials to Avoid Incompatible/reactive with alkali metals, ammonia, oxidising agents, peroxides.

**Hazardous Decomposition** 

Products

Fire/decomposition may produce irritating, corrosive and/or toxic gases, including Carbon oxides, Nitrogen oxides (NOx),

Hydrogen Chloride gas.

Hazardous Polymerisation No information available.

#### 11. TOXICOLOGICAL INFORMATION

#### General Information Tox

Toxicological information:

- Acute toxicity: Harmful if swallowed.
- Skin corrosion/irritation: Causes severe skin burns and eye damage.
- Serious eye damage/irritation: Causes serious eye damage.
- Respiratory/skin sensitisation: Not considered to be skin sensitising.
- Germ cell mutagenicity: Not considered to have mutagenic or genotoxic potential.
- Carcinogenicity: No information available.
- Reproductive toxicity: Not considered to have specific reproductive or developmental toxicity. Any reproductive and developmental effects were only observed secondary to maternal toxicity.
- STOT (single exposure): No information available.
- STOT (repeated exposure): Not considered to cause serious damage to health from repeated oral exposure at doses below acutely toxic doses.
- Aspiration toxicity: No information available.

Information on likely routes of exposure:

- Ingestion: Corrosive! Harmful if swallowed. Signs of poisoning may include nausea, vomiting, abdominal pain, anxiety, restlessness, coma, convulsions, hypotension, cyanosis, and apnoea due to respiratory muscle paralysis. Death can occur within one or three hours after ingestion of concentrated solutions.
- Eye contact: Corrosive! Causes serious eye damage.
- Skin contact: Corrosive! Causes severe skin burns.
- Inhalation: Corrosive! Inhalation exposure may result in respiratory irritation/burning, irritation to the mouth/throat/nose, coughing/choking, chest pain, disorientation, dizziness, and shortness of breath.

Chronic effects: No information available.

Acute

**Ingestion** Acute toxicity (Oral):

 ${\bf COMPONENT: Cetyl trimethylammonium\ chloride\ (CAS\ No.\ 112-02-7):}$ 

- LD50, Rat: 400 mg/kg [Supplier's SDS].

Other Acute toxicity (Dermal):

COMPONENT: Cetyltrimethylammonium chloride (CAS No. 112-02-7):

- LD50, Rat: 4,300 mg/kg [Supplier's SDS].

**Carcinogen Category** 

None

#### 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Aquatic toxicity:

COMPONENT: Cetyltrimethylammonium chloride (CAS No. 112-02-7): - LC50, Fish (Bluegill):  $60.0^{\circ}$  150.0 mg/L (96 h) [Supplier's SDS].

Persistence/Degradability No information available.

Mobility No information available.

**Environmental Fate** Very toxic to aquatic life with long lasting effects - Avoid release to the environment.

Bioaccumulation Potential No information available.

Environmental Impact No Data Available

#### 13. DISPOSAL CONSIDERATIONS

**General Information** Dispose of contents/container in accordance with local/regional/national regulations.

Special Precautions for Land Fill Incineration in recommended.

#### 14. TRANSPORT INFORMATION

#### Land Transport (Australia)

ADG Code

Proper Shipping Name CORROSIVE LIQUID, N.O.S. (Contains: Cetrimonium chloride)

Class 8 Corrosive Substances
Subsidiary Risk(s) No Data Available

**EPG** 37 Toxic And/Or Corrosive Substances Non-Combustible

 UN Number
 1760

 Hazchem
 2X

 Pack Group
 III

**Special Provision** No Data Available

## Land Transport (Malaysia)

ADR Code

Proper Shipping Name CORROSIVE LIQUID, N.O.S. (Contains: Cetrimonium chloride)

Class 8 Corrosive Substances
Subsidiary Risk(s) No Data Available

EPG 37 Toxic And/Or Corrosive Substances Non-Combustible

 UN Number
 1760

 Hazchem
 2X

 Pack Group
 III

Special Provision No Data Available

# Land Transport (New Zealand)

NZS5433

Proper Shipping Name CORROSIVE LIQUID, N.O.S. (Contains: Cetrimonium chloride)

Class 8 Corrosive Substances
Subsidiary Risk(s) No Data Available

EPG 37 Toxic And/Or Corrosive Substances Non-Combustible

 UN Number
 1760

 Hazchem
 2X

 Pack Group
 III

**Special Provision** No Data Available

## **Land Transport (United States of America)**

**US DOT** 

Proper Shipping Name CORROSIVE LIQUID, N.O.S. (Contains: Cetrimonium chloride)

Class 8 Corrosive Substances
Subsidiary Risk(s) No Data Available

ERG 154 Substances - Toxic and/or Corrosive (Non-Combustible)

 UN Number
 1760

 Hazchem
 2X

 Pack Group
 III

**Special Provision** No Data Available

#### **Sea Transport**

**IMDG** Code

Proper Shipping Name CORROSIVE LIQUID, N.O.S. (Contains: Cetrimonium chloride)

Class 8 Corrosive Substances
Subsidiary Risk(s) No Data Available

 UN Number
 1760

 Hazchem
 2X

 Pack Group
 III

**Special Provision** No Data Available

EMS F-A, S-B
Marine Pollutant Yes

## **Air Transport**

IATA DGR

Proper Shipping Name CORROSIVE LIQUID, N.O.S. (Contains: Cetrimonium chloride)

Class 8 Corrosive Substances
Subsidiary Risk(s) No Data Available

 UN Number
 1760

 Hazchem
 2X

 Pack Group
 III

**Special Provision** No Data Available

## **National Transport Commission (Australia)**

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

**Dangerous Goods Classification**Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by

Road & Rail (ADG Code)

#### 15. REGULATORY INFORMATION

General Information QUATERNARY AMMONIUM COMPOUNDS

Poisons Schedule (Aust) Schedule 6

## **Environmental Protection Authority (New Zealand)**

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code HSR002491 - Additives Process Chemicals and Raw Materials (Corrosive) Group Standard 2020

## **National/Regional Inventories**

Australia (AIIC) Listed

Canada (DSL) Not Determined

Canada (NDSL) Not Determined

China (IECSC) Not Determined

**Europe (EINECS)** 203-928-6

Europe (REACh) Not Determined

Japan (ENCS/METI) Not Determined

Korea (KECI) Not Determined

Malaysia (EHS Register) Not Determined

New Zealand (NZIoC) Listed

Philippines (PICCS) Not Determined

Switzerland (Giftliste 1) Not Determined

**Switzerland (Inventory of Notified** 

Substances)

Not Determined

Taiwan (NCSR) Not Determined

USA (TSCA) Not Determined

## **16. OTHER INFORMATION**

Related Product Codes CECHL05050

Revision 1

**AICS** Australian Inventory of Chemical Substances

atm Atmosphere

**CAS** Chemical Abstracts Service (Registry Number)

cm<sup>2</sup> Square Centimetres

CO2 Carbon Dioxide

COD Chemical Oxygen Demand

deg C (°C) Degrees Celcius

EPA (New Zealand) Environmental Protection Authority of New Zealand

deg F (°F) Degrees Farenheit

**g** Grams

g/cm³ Grams per Cubic Centimetre

g/I Grams per Litre

**HSNO** Hazardous Substance and New Organism

**IDLH** Immediately Dangerous to Life and Health

immiscible Liquids are insoluable in each other.

inHg Inch of Mercury

inH20 Inch of Water

K Kelvin

kg Kilogram

kg/m³ Kilograms per Cubic Metre

**Ib** Pound

**LC50** LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.

**LD50** LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.

Itr or L Litre

m³ Cubic Metre

mbar Millibar

mg Milligram

mg/24H Milligrams per 24 Hours

mg/kg Milligrams per Kilogram

mg/m³ Milligrams per Cubic Metre

Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.

mm Millimetre

mmH20 Millimetres of Water

mPa.s Millipascals per Second

N/A Not Applicable

NIOSH National Institute for Occupational Safety and Health

**NOHSC** National Occupational Heath and Safety Commission

**OECD** Organisation for Economic Co-operation and Development

Oz Ounce

**PEL** Permissible Exposure Limit

Pa Pascal

ppb Parts per Billion

ppm Parts per Million

ppm/2h Parts per Million per 2 Hours

ppm/6h Parts per Million per 6 Hours

**psi** Pounds per Square Inch

**R** Rankine

**RCP** Reciprocal Calculation Procedure

**STEL** Short Term Exposure Limit

**TLV** Threshold Limit Value

tne Tonne

TWA Time Weighted Average

ug/24H Micrograms per 24 Hours

**UN** United Nations

wt Weight