



Hazardous Substance, Dangerous Goods

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: **CIRCOMATE**

Recommended use: Circulation & Bomb Cleaner

Supplier: Tasman Chemicals Pty Ltd

ACN 005 072 659

Street Address: 1-7 Bell Grove
Braeside, VIC, 3195
Australia

Telephone: +613 9587-6777

Facsimile: +613 9587-5255

Emergency Telephone number: Australia 1800 334 556

2. HAZARDS IDENTIFICATION

This material is hazardous according to health criteria of Safe Work Australia.



Signal Word

Danger

Hazard Classifications

Corrosive to Metals - Category 1
Skin Corrosion/Irritation - Category 1A
Serious Eye Damage/Irritation - Category 1
Specific Target Organ Toxicity (Single Exposure) - Category 3
Respiratory Tract Irritation
Acute Hazard to the Aquatic Environment - Category 3
Chronic Hazard to the Aquatic Environment - Category 3

Hazard Statements

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.

Prevention Precautionary Statements

P102 Keep out of reach of children.
P103 Read label before use.
P234 Keep only in original container.
P260 Do not breathe dust, fume, gas, mist, vapours or spray.
P261 Avoid breathing dust, fume, gas, mist, vapours or spray..
P264 Wash hands, face and all exposed skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective clothing, gloves and eye/face protection.

Response Precautionary Statements

P101 If medical advice is needed, have product container or label at hand.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Safety Data Sheet



TASMAN CHEMICALS
"Tasman trusted products"

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position 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.
P310 Immediately call a POISON CENTER or doctor/physician.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P363 Wash contaminated clothing before reuse.
P390 Absorb spillage to prevent material damage.

Storage Precautionary Statements

P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P406 Store in original container with a resistant inner liner.

Disposal Precautionary Statement

P501 Dispose of contents/container in accordance with local, regional, national and international regulations.

Poison Schedule: S6. Poison

DANGEROUS GOOD CLASSIFICATION

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

Dangerous Goods Class: 8

Classified as a C1 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and transport requirements.

3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO	PROPORTION
Sodium hydroxide (Na(OH))	1310-73-2	10 - 60 % (w/v)
Carbonic acid, disodium salt	497-19-8	10 - 60 % (w/v)
1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-dichloro-, sodium salt	2893-78-9	1 - 10 % (w/v)

Ingredients determined to be non-hazardous Balance

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

Inhalation: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Skin Contact: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs seek medical assistance. For gross contamination, immediately drench with water and remove clothing. Continue to flush skin and hair with plenty of water (and soap if material is insoluble). For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. If swelling, redness, blistering, or irritation occurs seek medical assistance.

Eye contact: Immediately irrigate with copious quantities of water for 15 minutes. Eyelids to be held open. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport to hospital or medical centre. If in eyes wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

Product Name: CIRCOMATE

Reference No: 094102,094105

Issued: 2020-07-21

Version: 6

Page 2 of 8

Safety Data Sheet



TASMAN CHEMICALS

"Tasman trusted products"

Ingestion: Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Seek medical advice.

Notes to physician: Treat symptomatically.

5. FIRE FIGHTING MEASURES

Hazchem Code: 2X

Suitable extinguishing media: If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).

Specific hazards: Combustible liquid.

Fire fighting further advice: On burning or decomposing may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion or decomposition.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours or dust. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.

LARGE SPILLS

Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.

Dangerous Goods – Initial Emergency Response Guide No: 37

7. HANDLING AND STORAGE

Handling: Avoid eye contact and skin contact. Avoid inhalation of dust.

Storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition. Store locked up. Store in corrosive resistant container with a resistant inner liner. Keep container standing upright. Keep containers closed when not in use - check regularly for spills.

Classified as a C1 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and transport requirements.

This material is classified as a Class 8 Corrosive as per the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and/or the "New Zealand NZS5433: Transport of Dangerous Goods on Land" and must be stored in accordance with the relevant regulations.

This material is a Scheduled Poison Schedule 6 (Poison) and must be stored, maintained and used in accordance with the relevant regulations.



8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits:

	TWA		STEL		NOTICES
	ppm	mg/m3	ppm	mg/m3	
Chlorine	1 Peak limitation	3 Peak limitation	-	-	-
Sodium hydroxide	-	2 Peak limitation	-	-	-

As published by Safe Work Australia.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) - the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Biological Limit Values: As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the ingredients in this material do not have a Biological Limit Allocated.

Engineering Measures: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use only in well ventilated areas. Avoid generating and inhaling dusts. Use with local exhaust ventilation or while wearing dust mask. Vapour heavier than air - prevent concentration in hollows or sumps. Do NOT enter confined spaces where vapour may have collected.

Personal Protection Equipment: SAFETY SHOES, OVERALLS, GLOVES, APRON, SAFETY GLASSES.

Wear safety shoes, overalls, gloves, apron, safety glasses. Available information suggests that gloves made from natural rubber, nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin contact. Avoid inhalation of dust. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Material Family: Organic Compounds
Base Units: Kilogram
Form: Crystalline Powder
Colour: White Powder
Odour: Chlorine

Solubility: Miscible in water
Specific Gravity (20 °C): N App

Product Name: CIRCOMATE

Reference No: 094102,094105

Issued: 2020-07-21

Version: 6

Page 4 of 8

Safety Data Sheet



TASMAN CHEMICALS

"Tasman trusted products"

Density:	N App
Relative Vapour Density (air=1):	N App
Vapour Pressure (20 °C):	N App
Flash Point (°C):	N App
Flammability Limits (%):	N App
Autoignition Temperature (°C):	N App
Melting Point/Range (°C):	250
Boiling Point/Range (°C):	N App
pH:	13 -14 (1% solution)
Viscosity:	N App
Total VOC (g/Litre):	N App

(Typical values only - consult specification sheet)

N Av = Not available, N App = Not applicable

10. STABILITY AND REACTIVITY

Chemical stability: Reaction with metals will produce flammable hydrogen gas, which will burn if ignited.

Conditions to avoid: Elevated temperatures and sources of ignition.

Incompatible materials: Corrosive to aluminium, zinc and tin, liberating flammable hydrogen gas. Absorbs carbon dioxide from air.

Hazardous decomposition products: Reacts violently with acids to produce chlorine gas. Reacts with ammonium salts liberating ammonia gas

Hazardous reactions: Reacts exothermically on dilution with water

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Acute Effects

Inhalation: Material is an irritant to mucous membranes and respiratory tract.

Skin contact: Contact with skin will result in severe irritation. Corrosive to skin - may cause skin burns. Will have a degreasing action on the skin. Repeated or prolonged skin contact may lead to irritant contact dermatitis.

Ingestion: Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract.

Eye contact: A severe eye irritant. Corrosive to eyes: contact can cause corneal burns. Contamination of eyes can result in permanent injury. Exposure to the dust may cause discomfort due to particulate nature. May cause physical irritation to the eyes.

Acute toxicity

Inhalation: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >5 mg/L

Skin contact: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >2,000 mg/Kg LD50 (Rabbit): 500 mg/24 hour (Sodium Hydroxide)

Ingestion: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >2,000 mg/Kg LD50 (Rabbit): 500 mg/kg (Sodium Hydroxide)
LD50 (Rat): 1420 mg/kg (Chlorine)

Safety Data Sheet



TASMAN CHEMICALS

"Tasman trusted products"

Corrosion/Irritancy: Eye: this material has been classified as a Category 1 Hazard (irreversible effects to eyes).
Skin: this material has been classified as a Category 1A Hazard (irreversible effects to skin).

Sensitisation: Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as not a skin sensitiser.

Aspiration hazard: This material has been classified as non-hazardous.

Specific target organ toxicity (single exposure): This material has been classified as a Category 3 Hazard. Exposure via inhalation may result in respiratory irritation.

Chronic Toxicity

Mutagenicity: This material has been classified as non-hazardous.

Carcinogenicity: This material has been classified as non-hazardous.

Reproductive toxicity (including via lactation): This material has been classified as non-hazardous.

Specific target organ toxicity (repeat exposure): This material has been classified as non-hazardous.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Acute aquatic hazard: This material has been classified as a Category Acute 3 Hazard. Acute toxicity estimate (based on ingredients): 10 - 100 mg/L

Long-term aquatic hazard: This material has been classified as a Category Chronic 3 Hazard. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data, Acute toxicity estimate (based on ingredients): 10 - 100 mg/L, where the substance is not rapidly degradable and/or $BCF \geq 500$ and/or $\log K_{ow} \geq 4$.

Ecotoxicity: No information available.

Persistence and degradability: No information available.

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

Safety Data Sheet



TASMAN CHEMICALS
"Tasman trusted products"



UN No: 1759
Dangerous Goods Class: 8
Packing Group: III
Hazchem Code: 2X
Emergency Response Guide No: 37

Proper Shipping Name: CORROSIVE SOLID, N.O.S. (1759)

Segregation Dangerous Goods: Not to be loaded with explosives (Class 1), dangerous when wet substances (Class 4.3), oxidising agents (Class 5.1), organic peroxides (Class 5.2), radioactive substances (Class 7) or food and food packaging in any quantity. Note 1: Concentrated strong alkalis are incompatible with concentrated strong acids. Note 2: Concentrated strong acids are incompatible with concentrated strong alkalis. Note 3: Acids are incompatible with Dangerous Goods of Class 6 which are cyanides. Exemptions may apply.

MARINE TRANSPORT

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea. This material is classified as a Marine Pollutant (P) according to the International Maritime Dangerous Goods Code.



UN No: 1759
Dangerous Goods Class: 8
Packing Group: III

Proper Shipping Name: CORROSIVE SOLID, N.O.S. (1759)

AIR TRANSPORT

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.



UN No: 1759
Dangerous Goods Class: 8
Packing Group: III

Proper Shipping Name: CORROSIVE SOLID, N.O.S. (1759)

15. REGULATORY INFORMATION

This material/constituent(s) is covered by the following requirements:

- The Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) established under the Therapeutic Goods Act (Commonwealth).
- All components of this product are listed on or exempt from the Australian Inventory of Chemical Substances (AICS).
- The Agricultural and Veterinary Chemicals Act (Commonwealth) and/or applicable Commonwealth, State or Territory control-of-use legislation.



16. OTHER INFORMATION

Reason for issue: 5 Yearly Revision

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken.

Safety Data Sheets are updated frequently. Please ensure you have a current copy.