

CHLORADET**1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

Product Name: **CHLORADET**
 Other Names: Caustic Alkali Liquid, N.O.S.
 Manufacturer's Product Code: CH5, CH20, CH200
 Product Use: Cleaner, sanitiser and disinfectant for hard surfaces.

COMPANY DETAILS

Company: Agar Cleaning Systems Pty. Ltd.
 Address: 12-14 Cope Street, Preston, Vic. 3072
 Telephone: 03 9480 3000 Facsimile: 03 9480 5100
 Web: www.agar.com.au
 Agar SDS are available from this website.
 E-mail: admin@agar.com.au

Emergency Telephone Number: 131 126 (Aust wide)

2 HAZARDS IDENTIFICATION

Hazardous according to criteria of Safe Work Australia.
Corrosive C

R34 Causes burns.

R31 Contact with acids liberates toxic gas.

R41 Risk of serious damage to eyes.

S2 Keep out of the reach of children.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28 After contact with skin, wash with plenty of water.

S37/39 Wear suitable gloves and eye/face protection.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible).

S50 Do not mix with acids.

S61 Avoid release to the environment. Refer to special instructions/Material Safety Data Sheets.

Chloradet becomes non-hazardous at concentrations below 19% in water.

3 COMPOSITION / INFORMATION ON INGREDIENTS**Ingredients:**

Chemical Entity:	CAS No.:	Proportion:
Sodium hypochlorite (available chlorine is less than 8%)	7681-52-9	< 10%
Sodium chloride	7647-14-5	< 10%
Sodium hydroxide	1310-73-2	< 10%
Surfactants	non-haz	10 - < 30%
Water	7732-18-5	to 100%

4 FIRST AID MEASURES**Poisons Information Centre: Phone 131 126**

Swallowed: If poisoning occurs, contact a doctor or Poisons Information Centre. If swallowed, do NOT induce vomiting. Give a glass of water. Rinse mouth with water. Never give anything by mouth to an unconscious person.

Eye: Immediately hold the eyes open and wash continuously for at least 15 minutes with fresh running water. Ensure irrigation under eyelids by occasionally lifting the upper and lower lids. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin: Remove any contaminated clothing and flush area with water and soap if available. Seek medical attention in the event of irritation.

Inhaled: Remove victim from exposure – but avoid becoming a casualty. If breathing is laboured and patient is cyanotic (blue), ensure airways are clear and have qualified person give oxygen through a face mask. If breathing has stopped, apply artificial respiration at once. In the event of cardiac arrest, apply external cardiac massage. For all but the most minor symptoms arrange for patient to be seen by a doctor as soon as possible – either on site or at the nearest hospital.

First Aid Facilities: Maintain eyewash fountain and drench facilities in work area.

Advice to Doctor: Treat symptomatically as for strong alkaline material.

5 FIRE FIGHTING MEASURES

Fire/Explosion Hazard: Chloradet does not burn. Fire or strong heat will produce irritating, poisonous or corrosive gases. Containers may explode when heated. Some may ignite combustibles (wood, paper, clothing, etc.) Contact with metals may produce flammable hydrogen gas.

Fire Extinguishing media:

Small fire: Use dry chemical, CO₂ or water spray.

Large fire: Use water spray, fog or foam. Do NOT use water jets. If safe to do so, move undamaged containers from the fire area. Cool containers with flooding quantities of water until well after the fire is out. Avoid getting water inside the containers.

Fire Fighter's PPE: Wear SCBA and chemical splash suit. Fully encapsulating, gas-tight suits should be worn for maximum protection. Structural firefighter's uniform is NOT effective for this material.

Hazardous Reactions: Reacts vigorously with acids producing dangerous levels of gaseous chlorine. May yield toxic fumes if involved in a fire.

6 ACCIDENTAL RELEASE MEASURES

Clean up all spills immediately. Eliminate all ignition sources (no smoking or flames) within at least 50m. Avoid contact with skin and eyes. Do not touch or walk through this product. Stop leak if safe to do so. Prevent entry into waterways, drains or confined areas. Cover with DRY earth, sand or other non-combustible absorbent followed by plastic sheet to minimize spreading or contact with rain. Do not let water run into containers.

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7 HANDLING AND STORAGE

Storage and Transport: Store in a cool, dry place that is well-ventilated and away from foodstuff containers. Direct sunlight should be avoided.

Stability: Stable. However, heat, light, contamination with acids or contact with metal surfaces may promote the formation of toxic chlorine gas.

Incompatibility (Materials to avoid for purposes of transport, handling and storage only): Avoid storage with acids, oxidising agents, reducing agents, metals and metallic salts.

Incompatible with amines, ammonium salts, aziridine, methanol and phenyl acetonitrile.

Class 8 Corrosives shall not be loaded with other Dangerous Goods of Classes 1, 4.3, 5.1, 5.2, 7 or 8 (acids only) or with foodstuffs.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards: None assigned for mixture.
Atmospheric Contaminant Exposure Standard for:
Chlorine (a potential decomposition product)

CAS No. 7782-50-5 TWA = 1 ppm (3 mg/cu.m)
Peak limitation
STEL = -

Sodium hydroxide :

CAS No: 1310-73-2 TWA = - ppm (2 mg/cu.m)
Peak limitation
STEL = -

[Source: Safe Work Australia HSIS- 2011]

Engineering Controls: Mechanical ventilation: not required under normal conditions, but local exhaust ventilation should be used to control any air contaminants to within the Exposure Standards.

Personal Protection:

Gloves - Wear rubber, neoprene or nitrile gloves.

Note: Resistance of glove materials can vary. Evaluate resistance under conditions of use and maintain PPE carefully.

Eye protection – Safety glasses should be worn.

Respiratory – If inhalation risk exists, a suitable cartridge type Respirator should be worn.

Other – Protective overalls are desirable. An eyewash unit should be available.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colourless thick liquid

Odour: Faint chlorine odour

pH = 12.5 +/- 0.5

Vapour Pressure: N/K

Vapour Density: N/K

Boiling Point: Approx 100°C

Freezing Point: < 0°C

Solubility in water: Infinitely miscible

Specific Gravity: 1.10

Evaporation Rate: As water

% Volatile by vol: 70 – 85% water

10 STABILITY AND REACTIVITY

Chloradet is corrosive to aluminium, zinc and tin. It reacts with metal salts, peroxides and reducing agents. Do not mix with ammonia, hydrocarbons, acids, alcohols or ethers.

No risk of hazardous polymerization.

11 TOXICOLOGICAL INFORMATION

Health Effects: *Acute* -

Swallowed: Irritating to the gastro-intestinal tract if swallowed. May cause nausea, vomiting, headache, corrosion of mucous membranes, esophageal or gastric perforation and laryngeal edema.

Eye: Eye contact may result in burns that could produce permanent damage.

Skin: Principal route of exposure is usually by skin contact. Repeated or prolonged skin contact may cause swelling, redness, blistering or dermatitis. Chloradet acts as a skin sensitizer and may burn sensitive skin. It is not absorbed through the skin.

Inhaled: Overexposure to inhalation can result in coughing and respiratory difficulty. The vapour if concentrated may irritate the lungs. If reaction occurs to liberate chlorine (such as accidental add mixture with acids), self-contained or air supplied breathing apparatus will be required.

Health Effects – *Chronic*: Repeated or prolonged skin contact may cause chronic dermatitis.

Toxicity Data: Not available for mixture.
sodium hydroxide : oral lowest lethal dose (rabbit) 500 mg/kg (10% solution) Low systemic toxicity.

sodium hypochlorite: by ingestion, Grade 1: oral rat LD50 = 8.91 g/kg.

(Note: this data is from published information. Agar Cleaning Systems does not carry out animal tests).

12 ECOLOGICAL INFORMATION

Ecotoxicity: Toxic to aquatic organisms.

Persistence and degradability: The surfactants in Chloradet are readily biodegradable.

Mobility: -

Advice: Product disperses in water. Avoid contaminating waterways.

13 DISPOSAL CONSIDERATIONS

For disposal, refer to State Land Waste Management Authority.

14 TRANSPORT INFORMATION

UN No.: 1719 | Class: 8 | Packg.Group: II | Hazchem: 2R

15 REGULATORY INFORMATION

Poisons Schedule Number: Schedule 5.

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16 OTHER INFORMATION

AICS Listing: All components of Chloradet are listed on the Australian Inventory of Chemical Substances (AICS).

Date: This SDS issued: January 24, 2011

Abbreviations and Definitions of terms used:

<	less than
>	greater than
AICS	Australian Inventory of Chemical Substances
CAS	Chemical Abstracts Service (Registry Number)
COD	Chemical Oxygen Demand
deg C	Degrees Celsius
g	gram
g/L	grams per litre
HSIS	Hazardous Substance Information System
kg	kilogram
L	Litre
LC50	The concentration of a material (inhaled) that will be lethal to 50% of the test animals.
LD50	The dose (swallowed all at once) which is lethal to 50% of a group of test animals.
m3	Cubic metre
mg	milligram
mg/m3	milligrams per cubic metre
miscible	A liquid that mixes homogeneously with another liquid
N/A	Not applicable
N/K	Not Known
NIOSH	National Institute for Occupational Safety and Health
non-haz	Non- hazardous
PEL	Permissible Exposure Limit
ppb	Parts per billion
ppm	Parts per million
STEL	Short term exposure limit
TLV	Threshold Limit Value
TWA	Time Weighted average
UN	United Nations (Number)
wt	weight

The information in this Data Sheet is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Agar Cleaning Systems accepts no tortious or contractual liability for any loss or damages suffered as a consequence of reliance on the information and advice contained herein.

End of SDS.