

Revision date: 14-Oct-2024

Revision Number 6

## Section 1: Identification

### Product identifier

**Product Name** CHLORINE REAGENT 1

**Product Code(s)** 000000008612

### Other means of identification

### Recommended use of the chemical and restrictions on use

**Recommended use** Laboratory reagent.

**Uses advised against** Foodstuffs.

### Details of the supplier of the safety data sheet

#### Supplier

IXOM Operations Pty Ltd (Incorporated in Australia)  
 NZBN: 9429041465226  
 Street Address: 166 Totara Street  
 Mt Maunganui South  
 New Zealand

Telephone Number: +64 9 368 2700

Facsimile: +64 9 368 2710

### Emergency telephone number

**Emergency Telephone** 0 800 734 607 (ALL HOURS)

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

## Section 2: Hazard identification

Not classified as a Dangerous Good under NZS 5433 Transport of Dangerous Goods on Land; NON-DANGEROUS GOODS.

Classified as hazardous according to criteria in the Hazardous Substances (Hazard Classification) Notice 2020.

### GHS Classification

**Skin sensitization**

Category 1

### Label elements



**Signal word**

Warning

**Hazard statements**

H317 - May cause an allergic skin reaction

**Precautionary Statements - Prevention**

Avoid breathing dust/fume/gas/mist/vapors/spray.  
Contaminated work clothing must not be allowed out of the workplace.  
Wear protective gloves and protective clothing.

**Precautionary Statements - Response**

Specific treatment (see First aid on this SDS).  
IF ON SKIN: Wash with plenty of soap and water.  
If skin irritation or rash occurs: Get medical advice/attention.  
Wash contaminated clothing before reuse.

**Precautionary Statements - Storage**

No storage statements.

**Precautionary Statements - Disposal**

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

**Other hazards which do not result in classification**

No information available.

**Section 3: Composition/information on ingredients**

Chemical name	CAS No.	Weight-%
Potassium iodide	7681-11-0	10-<30
Sodium hydroxide	1310-73-2	<0.05
Water and other non-hazardous components	-	to 100

**Section 4: First-aid measures****Description of first aid measures**

<b>General advice</b>	For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.
<b>Inhalation</b>	Remove to fresh air. (Call a physician if symptoms occur).
<b>Eye contact</b>	In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.
<b>Skin contact</b>	Wash skin with soap and water. (Call a physician if symptoms occur).
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Drink 1 or 2 glasses of water. Get medical attention if symptoms occur.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** May cause allergic skin reaction. Redness. Rashes. Hives.

**Effects of Exposure** No information available.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically. May cause sensitization by skin contact.

## **Section 5: Fire-fighting measures**

### **Suitable Extinguishing Media**

**Suitable Extinguishing Media** Use extinguishing agent suitable for type of surrounding fire.

**Unsuitable extinguishing media** No information available.

### **Specific hazards arising from the chemical**

**Specific hazards arising from the chemical** Non-combustible. Decomposes on heating emitting toxic fumes.

### **Special protective actions for fire-fighters**

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## **Section 6: Accidental release measures**

### **Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Avoid contact with skin and eyes. Avoid breathing vapors or mists. Use personal protective equipment as required. Wash thoroughly after handling.

**For emergency responders** Use personal protection recommended in Section 8.

### **Environmental precautions**

**Environmental precautions** See Section 12 for additional Ecological Information.

### **Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. After cleaning, flush away traces with water.

### **Precautions to prevent secondary hazards**

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## **Section 7: Handling and storage**

### **Precautions for safe handling**

**Advice on safe handling** Avoid contact with skin and eyes. Avoid breathing vapors or mists. Wash thoroughly after handling.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from freezing. Keep container closed when not in use.

**Incompatible materials** None known based on information supplied.

**Section 8: Exposure controls/personal protection**

**Control parameters**

**Exposure Limits** No value assigned for this specific material by the New Zealand Workplace Health & Safety Authority. However, Workplace Exposure Standard(s) for constituents:.

Chemical name	New Zealand	Australia	ACGIH TLV	United Kingdom
Potassium iodide 7681-11-0	-	-	TWA: 0.01 mg/m <sup>3</sup> I inhalable particulate matter Sk*	-
Sodium hydroxide 1310-73-2	Ceiling 2 mg/m <sup>3</sup>	Peak: 2 mg/m <sup>3</sup>	-	-

As published by the New Zealand Workplace Health & Safety Authority.

WES - Ceiling (Workplace Exposure Standard - Ceiling). A concentration that should not be exceeded during any part of the working day.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace 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.

**Appropriate engineering controls**

**Engineering controls** Apply technical measures to comply with occupational exposure limits.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

**Individual protection measures, such as personal protective equipment**

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES.



Eye/face protection

Glasses.

Hand protection

Impervious gloves.

Skin and body protection

Overalls. Protective shoes or boots.

Respiratory protection

If determined by a risk assessment an inhalation risk exists, wear a suitable mist respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

Environmental exposure controls

No information available.

## Section 9: Physical and chemical properties

### Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Clear
Color	Colourless
Odor	Odourless
Odor threshold	No information available

Property	Values	Remarks • Method
pH	7	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash point	Not applicable	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	Not applicable	
Lower flammability or explosive limits	Not applicable	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

### Other information

Particle characteristics

## Section 10: Stability and reactivity

**Reactivity****Reactivity** No information available.**Chemical stability****Stability** Stable under normal conditions.**Explosion data****Sensitivity to mechanical impact** None.**Sensitivity to static discharge** None.**Possibility of hazardous reactions****Hazardous polymerization** Hazardous polymerization does not occur.**Possibility of hazardous reactions** None under normal processing.**Conditions to avoid****Conditions to avoid** None known based on information supplied.**Incompatible materials****Incompatible materials** None known based on information supplied.**Hazardous decomposition products****Hazardous decomposition products** Potassium oxides. Iodine vapours.**Section 11: Toxicological information****Acute toxicity****Information on likely routes of exposure****Product Information** No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are:**Inhalation** May cause irritation.**Eye contact** May cause irritation.**Skin contact** May cause irritation. May cause sensitization by skin contact.**Ingestion** May cause gastrointestinal discomfort if consumed in large amounts.**Symptoms** May cause allergic skin reaction. Redness. Rashes. Hives.**Acute toxicity****Numerical measures of toxicity**  
No information available**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Potassium iodide	-	> 2000 mg/kg ( Rat )	-
Sodium hydroxide	= 325 mg/kg ( Rat )	= 1350 mg/kg ( Rabbit )	-

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

<b>Skin corrosion/irritation</b>	No information available.
<b>Serious eye damage/eye irritation</b>	No information available.
<b>Respiratory or skin sensitization</b>	May cause an allergic skin reaction. Classification is based on mixture calculation methods based on component data.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.
<b>Data used to identify the health effects</b>	Refer to Section 16 for Key literature references and sources for data used to compile the SDS.

## **Section 12: Ecological information**

### Ecotoxicity

**Aquatic ecotoxicity** Keep out of waterways.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Potassium iodide	-	LC50: >100mg/L (96h, Danio rerio)	-

**Terrestrial ecotoxicity** There is no data for this product.

**Persistence and degradability** No information available.

**Bioaccumulative potential**

**Bioaccumulation** There is no data for this product.

**Mobility in soil**

**Mobility** No information available.

**Other adverse effects**

No information available.

**Section 13: Disposal considerations****Waste treatment methods**

**Waste from residues/unused products** Dispose of product in packaging in a way that is consistent with the EPA Consolidation 30 April 2021 of the Hazardous Substances (Disposal) Notice 2017 and the Act. Treat the substance using a method that changes the characteristics or composition of the substance so that the substance is no longer a hazardous substance; or export the substance from New Zealand as waste.

**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal..

**Section 14: Transport information**

**ROAD AND RAIL TRANSPORT** Not classified as a Dangerous Good under NZS 5433 Transport of Dangerous Goods on Land; NON-DANGEROUS GOODS.

**IATA** Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

**IMDG** Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

No information available

**Special precautions for user**

Please refer to the applicable dangerous goods regulations for additional information

**Section 15: Regulatory information****Safety, health and environmental regulations/legislation specific for the substance or mixture**

**EPA New Zealand HSNO approval code or group standard** HSR002596 - Laboratory Chemicals and Reagent Kits

**National regulations** There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances

**Certified handlers, tracking and** Certified handlers are required for some substances. This includes substances requiring a



**controlled substance license requirements**

controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information

Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information

Controlled substance licenses are required to possess certain explosives, vertebrate toxic agents and fumigants. See Part 7 of the Health and Safety at Work Regulation 2017 for more information

**International Regulations**

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

**International Inventories****NZIoC**

All the hazardous constituents of this material are listed on the New Zealand Inventory of Chemicals.

**TSCA**

Contact supplier for inventory compliance status.

**DSL/NDSL**

Contact supplier for inventory compliance status.

**EINECS/ELINCS**

Contact supplier for inventory compliance status.

**ENCS**

Contact supplier for inventory compliance status.

**IECSC**

Contact supplier for inventory compliance status.

**KECL**

Contact supplier for inventory compliance status.

**PICCS**

Contact supplier for inventory compliance status.

**AIIC**

All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals.

**TCSI**

Contact supplier for inventory compliance status.

**Legend:**

**NZIoC** - New Zealand Inventory of Chemicals

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AIIC**- Australian Inventory of Industrial Chemicals

**TCSI** - Taiwan Chemical Substance Inventory

**Section 16: Other information**

Supplier Safety Data Sheet 04/ 2022

**Prepared By**

This Safety Data Sheet has been prepared by IXOM Operations Pty Ltd (Toxicology and SDS Services).

**Revision date:**

14-Oct-2024

**Reason(s) For Issue:**

Revised Primary SDS

Updated Formulation

Change in Hazardous Chemical Classification

Change in Group Standard (for NZ)

**Revision Note:**

\*\*\*Indicates updated data since last publication.

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend**

SVHC: Substances of Very High Concern for Authorization:

PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances

vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances

STOT: Specific Target Organ Toxicity

ATE: Acute Toxicity Estimate

LC50: 50% Lethal Concentration

LD50: 50% Lethal Dose

**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
**	Hazard Designation	+	Sensitizers
C	Carcinogen		

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

Environmental Protection Agency

Acute Exposure Guideline Level(s) (AEGl(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

U.S. National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

6.5B

**Disclaimer**

**This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since IXOM Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.**

**If clarification or further information is needed, the user should contact their IXOM representative or IXOM Operations Pty Ltd at the contact details on page 1.**

**IXOM Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.**

**End of Safety Data Sheet**