

Safety Data Sheet **HYDROCHLORIC ACID 0.1 - <10.0%**

SDS no. G8SN81SD • Version 1.0 • Date of issue: 2023-01-14

SECTION 1: Identification

GHS Product identifier

Product name HYDROCHLORIC ACID 0.1 - <10.0%

Recommended use of the chemical and restrictions on use

Laboratory reagent.

Supplier's details

Name ChemSupply Australia Pty Ltd
Address 38-50 Bedford Street
5013 Gillman South Australia
Australia

Telephone 08 8440 2000
email www.chemsupply.com

Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

SECTION 2: Hazard identification

General hazard statement

Classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 7

- Corrosive to metals, Cat. 1
- Serious eye damage/eye irritation, Cat. 1
- Skin corrosion/irritation, Cat. 1B

GHS label elements, including precautionary statements

Pictograms



Signal word

Danger

Hazard statement(s)

H290

May be corrosive to metals

H314

Causes severe skin burns and eye damage

Precautionary statement(s)

P234

Keep only in original packaging.

P390

Absorb spillage to prevent material-damage.

P406

Store in a corrosive resistant container with a resistant inner liner.

P280

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

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/doctor/physician

P260

Do not breathe dust/fume/gas/mist/vapors/spray.

P264

Wash hands thoroughly after handling.

P301+P330+P331

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P363

Wash contaminated clothing before reuse.

P304+P340

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P405

Store locked up.

P501

Dispose of contents/container to an approved waste disposal facility

SECTION 3: Composition/information on ingredients

Mixtures

Aqueous solution of the gas hydrogen chloride.

Components

Component	Concentration
HYDROCHLORIC ACID (<37%) (CAS no.: 7647-01-0; EC no.: 231-595-7; Index no.: 017-002-01-X)	0.1 - 9.9 % (weight)
CLASSIFICATIONS: Specific target organ toxicity following single exposure, Cat. 3; Skin corrosion/irritation, Cat. 1B. HAZARDS: H314 - Causes severe skin burns and eye damage; H335 - May cause respiratory irritation. [SCLs/M-factors/ATEs]: Skin Corr. 1B; H314: C ≥ 25 %; Skin Irrit. 2; H315: 10 % ≤ C < 25 %; Eye Irrit. 2; H319: 10 % ≤ C < 25 %; STOT SE 3; H335: C ≥ 10 %	

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice

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

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

If inhaled

If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

In case of skin contact

If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

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In case of eye contact

If in eyes, hold eyelids apart and flush eye continuously with running water. 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.

If swallowed

If swallowed, do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of immediate medical attention and special treatment needed, if necessary

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

Advice to Doctor: Treat symptomatically as for acids.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Use fire extinguishing media appropriate for surrounding environment. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Specific hazards arising from the chemical

Material does not burn. Runoff may pollute waterways.

Special protective actions for fire-fighters

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

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 compatible, non-combustible material followed by a plastic sheet to minimize spreading or contact with rain. Use clean, non-sparking tools to collect material and place it into loosely-covered plastic containers for later disposal.

SEEK EXPERT ADVICE ON HANDLING AND DISPOSAL.

SECTION 7: Handling and storage

Precautions for safe handling

Avoid ingestion and inhalation of gas/fumes/vapour/spray mist. Avoid contact with eyes, on skin, or clothing. Use only with adequate ventilation.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Keep container in a cool, well-ventilated area. Keep well closed and protected from direct sunlight and moisture. Do not store in metal containers.

Very corrosive to most metals. Rubber-lined steel, Haveg, Hastelby and tantalum, are the most commonly used corrosion-resistant materials of construction. Rubber, glass, plastic and ceramic ware are also resistant to corrosion.

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Store at room temperature (15 to 25 °C recommended).

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Skin protection

Clean impervious clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Hand Protection: Normally not required but if in doubt ensure hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance.

Body protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

Respiratory protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/ NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Clear, colourless to light yellow liquid.
Color	No data available.
Odor	Odourless to slight, characteristic, irritating odour.
Odor threshold	No data available.
Melting point/freezing point	Approximately 0 °C (based on data for water); weighted average: -2.32 °C (3%); -18 °C (10%).
Boiling point or initial boiling point and boiling range	Approximately 100 °C.
Flammability	No data available.
Lower and upper explosion limit/flammability limit	No data available.
Flash point	No data available.
Explosive properties	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Oxidizing properties	No data available.
pH	For HCl solutions: 0.1 (1.0 N), 1.1 (0.1 N), 2.02 (0.01 N).
Kinematic viscosity	No data available.
Solubility	Solubility in Water: Miscible (soluble) in all proportions. [13] Solubility in Organic Solvents: Soluble in alcohols, diethyl ether and benzene; insoluble in hydrocarbons.

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Partition coefficient n-octanol/water (log value)
Vapor pressure
Evaporation rate
Density and/or relative density
Relative vapor density

No data available.
Essentially the same as water; 0.527 Pa (10%).
Essentially the same as water (0.36) (BuAc=1).
Approximately 1.
Essentially the same as water (0.62).

Particle characteristics

No data available.

Supplemental information regarding physical hazard classes

No data available.

Further safety characteristics (supplemental)

No data available.

SECTION 10: Stability and reactivity

Reactivity

Reacts with incompatible materials

Chemical stability

Stable at normal temperatures, pressures and conditions of use or storage.

Possibility of hazardous reactions

Will corrode metals. Will produce toxic gases on contact with cyanides, sulphides etc.

Conditions to avoid

Metals and incompatible materials.

Incompatible materials

Metals, bases (e.g. sodium hydroxide, amines), aldehydes, epoxides, reducing agents, oxidizing agents, permanganates, explosives, acetylides, borides, carbides, silicides, cyanides, sulfides and phosphide.

Hazardous decomposition products

Other decomposition products - No data available In the event of fire: see section 5

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Ingestion: May cause burns to mouth, throat and stomach.

Inhalation: May be harmful if inhaled.

Skin corrosion/irritation

Liquid is slightly to highly irritating to skin and may cause burns.

Serious eye damage/irritation

Liquid is irritating to highly irritating to eyes and may cause scarring of the cornea (based on animal data). Vapour may cause eye irritation.

Respiratory or skin sensitization

Inhalation of product vapours may cause irritation of nose, throat and respiratory system and possible harmful corrosive effects to the respiratory system. Not expected to be a respiratory or skin sensitiser.

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Germ cell mutagenicity

No human information is available. Questionable positive results reported in some short-term tests. Negative results in some in-vitro mammalian cell tests.

Not considered to be a mutagenic hazard.

Carcinogenicity

Not considered to be a carcinogenic hazard.

Hydrochloric acid [7647-01-0] is evaluated in the IARC Monographs (Vol. 54; 1992) as Group 3: Not classifiable as to carcinogenicity to humans.

Reproductive toxicity

Not considered to be toxic to reproduction.

Specific target organ toxicity (STOT) - single exposure

Not expected to cause toxicity to a specific target organ.

Specific target organ toxicity (STOT) - repeated exposure

Not expected to cause toxicity to a specific target organ.

Aspiration hazard

Not expected to be an aspiration hazard.

SECTION 12: Ecological information

Toxicity

The following applies to HCl in general: Harmful effect on aquatic organisms. Harmful effect due to pH shift. Does not cause biological oxygen deficit.

Persistence and degradability

No data available.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

Results of PBT and vPvB assessment

No data available.

Endocrine disrupting properties

No data available.

Other adverse effects

No data available.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

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Packaging disposal

Dispose of as unused product.

Other disposal recommendations

Do not discharge this material into waterways, drains and sewers.

SECTION 14: Transport information

ADG (Road and Rail)

UN Number: 1789

Class: 8

Packing Group: III

Proper Shipping Name: HYDROCHLORIC ACID

Hazchem emergency action code (EAC)

2R

IMDG

UN Number: 1789

Class: 8

Packing Group: III

EMS Number:

Proper Shipping Name: HYDROCHLORIC ACID

IATA

UN Number: 1789

Class: 8

Packing Group: III

Proper Shipping Name: HYDROCHLORIC ACID

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Australia SUSMP

Poison Schedule: S5

SECTION 16: Other information

Further information/disclaimer

ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.