

SAFETY DATA SHEET

HYDROCHLORIC ACID

Infosafe No.: LQ1TY
ISSUED Date : 09/08/2022
ISSUED by: BONDALL PTY LTD

Section 1 - Identification

Product Identifier

HYDROCHLORIC ACID

Company Name

BONDALL PTY LTD (ABN 27 008 734 996)

Address

Australia:

Unit 2, 115 Belmont Avenue,
Belmont, WA 6104

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New Zealand:

Owens Logistics,
3-5 Kahu Street,
Otahuhu, Auckland 2024

Telephone/Fax Number

Tel: Australia: +61 (8)6272 3800 / New Zealand: 0800 474 773

Fax: +61 (8)9277 4068

Emergency Phone Number

AU: 1800 638 556, NZ: 0800 154 666

Recommended use of the chemical and restrictions on use

Swimming pool chemical, pH neutraliser, General chemical – boiler scale removal, ore reduction, pickling and metal cleaning, laboratory reagent

Other Names

Name
POOL ACID

Illicit Drug Precursors

This product contains a Category III: Illicit Drug Reagent/Essential Chemical in the Code of Practice for Supply Diversion into Illicit Drug Manufacture.

Chemical of Security Concern

This product contains chemical(s) listed in the National Code of Practice for Chemicals of Security Concern.

Section 2 - Hazard(s) Identification

GHS classification of the substance/mixture

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

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Corrosive to metals: Category 1

Skin corrosion/irritation: Category 1B

Eye damage/irritation: Category 1

Specific target organ toxicity (single exposure): Category 3 (Respiratory tract irritation)

Signal Word (s)

DANGER

Hazard Statement (s)

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

Pictogram (s)

Corrosion, Exclamation mark

**Precautionary Statement – Prevention**

P234 Keep only in original packaging.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statement – Response

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.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

P310 Immediately call a POISON CENTER/doctor.

P390 Absorb spillage to prevent material damage.

Precautionary Statement – Storage

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P406 Store in a corrosion resistant container with a resistant inner liner.

Precautionary Statement – Disposal

P501 Dispose of contents/container to an approved waste disposal plant.

Section 3 - Composition and Information on Ingredients**Ingredients**

Name	CAS	Proportion
hydrochloric acid ... %	7647-01-0	10-35 %
Water	7732-18-5	Balance

Section 4 - First Aid Measures**Inhalation**

If inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.

Ingestion

Do not induce vomiting. Wash out mouth thoroughly with water. Seek immediate medical attention.

Skin

Remove all contaminated clothing immediately. Wash gently and thoroughly with water and non-abrasive soap for 15 minutes. Ensure contaminated clothing is washed before re-use or discard. Seek immediate medical attention.

Eye

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Seek immediate medical attention.

First Aid Facilities

Eyewash, safety shower and normal washroom facilities.

Advice to Doctor

Treat symptomatically.

Other Information

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

Section 5 - Firefighting Measures

Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable Extinguishing Media

Do not use water jet.

Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes and gases including hydrogen chloride.

Specific hazards arising from the chemical

This product is non combustible. However heating can cause expansion or decomposition leading to violent rupture of containers. Hydrogen chloride gas can be released.

Hazchem Code

2R

Decomposition Temperature

Not available

Precautions in connection with Fire

Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours or fumes. Water spray may be used to cool down heat-exposed containers. Fight fire from safe location. This product should be prevented from entering drains and watercourses.

Section 6 - Accidental Release Measures

Emergency Procedures

Evacuate all unprotected personnel. Do not allow contact with skin and eyes. Do not breathe mist/vapour. It is essential to wear self-contained breathing apparatus (S.C.B.A) and full personal protective equipment and clothing to prevent exposure. As a water based product, if spilt on electrical equipment the product will cause short-circuits. Avoid exposure to spillage by collecting the material using vacuum and transfer into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

Section 7 - Handling and Storage

Precautions for Safe Handling

Corrosive liquid. Attacks skin and eyes. Causes burns. Avoid breathing in vapours, mist or fumes. Wear suitable protective clothing, gloves and eye/face protection when mixing and using. Use in designated areas with adequate ventilation. Keep containers tightly closed. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands after handling, and before eating, drinking, smoking or using the toilet facilities.

Conditions for safe storage, including any incompatibilities

Corrosive liquid. Store in a cool dry well-ventilated area. Protect from freezing. Store away from oxidising agents and bases/acids. Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Provide a catch-tank in a bunded area. Store in original packages as approved by manufacturer. Ensure that storage conditions comply with applicable local and national regulations. For information on the design of the storeroom, reference should be made to Australian Standard AS 3780 - The storage and handling of corrosive substances.

Corrosiveness

May be corrosive to metals.

Section 8 - Exposure Controls and Personal Protection

Occupational exposure limit values

No exposure standards have been established for this material. However, the available exposure limits for ingredients are listed below:

Hydrogen chloride

Peak limitation: 5 ppm, 7.5 mg/m³

Peak Limitation: A ceiling concentration which should not be exceeded over a measurement period which should be as short as possible but not exceeding 15 minutes.

Source: Safe Work Australia

Biological Monitoring

No biological limits allocated.

Engineering Controls

This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator (such as a full-face respirator with multi-purpose combination or type ABEK respirator cartridges) 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.

Eye and Face Protection

Safety glasses with full face shield should be used. Eye protection devices should conform to relevant regulations.

Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 (series) - Eye Protectors for Industrial Applications.

Hand Protection

Wear gloves of impervious material. Final choice of appropriate gloves will vary according to individual circumstances. i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations. Reference should be made to AS/NZS 2161.1: 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.

Section 9 - Physical and Chemical Properties

Properties	Description	Properties	Description
Form	Liquid	Appearance	Liquid
Colour	Clear, colourless to slightly yellow liquid	Odour	Pungent
Melting Point	< -20°C	Boiling Point	98°C (for 28% concentration)
Decomposition Temperature	Not available	Solubility in Water	Miscible with water
Specific Gravity	1.14 (for 28% concentration) 1.16 (for 32% concentration)	pH	<1
Vapour Pressure	2 kPa	Relative Vapour Density (Air=1)	1.3
Evaporation Rate	Not available	Odour Threshold	Not available
Viscosity	Not available	Volatile Component	100%
Partition Coefficient: n-octanol/water (log value)	Not available	Flash Point	Not applicable
Flammability	Non-combustible liquid	Auto-Ignition Temperature	Not available
Flammable Limits - Lower	Not applicable	Flammable Limits - Upper	Not applicable
Explosion Properties	Not available	Oxidising Properties	Not available
Particle Characteristics	Not applicable		

Section 10 - Stability and Reactivity

Reactivity

Corrosive to many metals with the liberation of extremely flammable hydrogen gas.

Chemical Stability

Stable under normal conditions of storage and handling.

Possibility of hazardous reactions

Reacts with oxidising agents and sodium hypochlorite liberating toxic chlorine gas.

Conditions to Avoid

Keep away from heat and sources of ignition. Protect from moisture. Avoid dust generation. Avoid exposure to direct sunlight.

Incompatible Materials

Incompatible with alkalis, oxidising agents, sodium hypochlorite, permanganates, cyanides and many metals.

Hazardous Decomposition Products

Thermal decomposition may result in the release of toxic and/or irritating fumes and gases including hydrogen chloride and chlorine.

Hazardous Polymerization

Not available

Section 11 - Toxicological Information

Toxicology Information

No toxicity data available for this material.

However, for constituent HYDROGEN CHLORIDE:

Acute Toxicity - Oral

LD50(rabbit): 900 mg/kg

Acute Toxicity - Inhalation

LC50(rat): 3124 ppm/1h

Ingestion

Ingestion of this product will cause nausea, vomiting, abdominal pain and chemical burns to the mouth, throat and stomach.

Inhalation

Inhalation of mist or vapour will result in respiratory irritation and possible harmful corrosive effects including burns, lesions of the nasal septum, pulmonary edema, and scarring of tissue.

Skin

Causes burns. Corrosive to the skin. Skin contact can cause redness, itching, irritation, severe pain and chemical burns with resultant tissue destruction.

Skin Corrosion/Irritation

Rabbit : Result : Causes burns

Eye

Causes eye damage. Eye contact will cause stinging, blurring, tearing, severe pain and possible burns, necrosis, permanent damage and blindness.

Serious Eye Damage/Irritation

Rabbit : Result : Corrosive to eyes

Respiratory Sensitisation

Not expected to be a respiratory sensitiser.

Skin Sensitisation

Not expected to be a skin sensitiser.

Germ Cell Mutagenicity

Not considered to be a mutagenic hazard.

Carcinogenicity

Not considered to be a carcinogenic hazard.

Hydrochloric acid is listed as a Group 3: Not classifiable as to carcinogenicity to humans according to International Agency for Research on Cancer (IARC).

Reproductive Toxicity

Not considered to be toxic to reproduction.

STOT - Single Exposure

May cause respiratory irritation.

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

Ecotoxicity

Avoid contaminating waterways. This product is highly acidic. If large spills occur a water pH drop could be responsible for an environmental effect on aquatic organisms.

The available ecological data is given below.

Persistence and degradability

Not available

Mobility

Not available

Bioaccumulative Potential

Not available

Other Adverse Effects

Not available

Environmental Protection

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

Acute Toxicity - Fish

LC50 (Gambusia affinis, mosquito fish): 282 mg/L/96h

Section 13 - Disposal Considerations

Disposal Considerations

The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations. To minimise personal exposure, refer to Section 8 - Exposure Controls and Personal Protection.

Section 14 - Transport Information

Transport Information

This material is classified as a Class 8 Corrosive Substances Dangerous Goods

Class 8 Dangerous Goods are incompatible in a placard load with any of the following:

- Class 1: Explosives
 - Division 4.3: Dangerous when wet Substances
 - Division 5.1: Oxidising substances
 - Division 5.2: Organic peroxides
 - Class 6, Toxic or Infectious Substances, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids
 - Class 7: Radioactive materials unless specifically exempted
- and are incompatible with food and food packaging in any quantity.

Strong acids must not be loaded in the same freight container or on the same vehicle with strong alkalis. Packing Group I and II acids and alkalis should be considered as strong.

Marine Transport (IMO/IMDG):

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Class/Division: 8

UN No: 1789

Proper Shipping Name: HYDROCHLORIC ACID

Packing Group: II

EMS: F-A, S-B

Special Provisions: -

Air Transport (ICAO/IATA):

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

Class/Division: 8

UN No: 1789

Proper Shipping Name: Hydrochloric acid

Packing Group: II

Packaging Instructions (passenger & cargo): 851

Packaging Instructions (cargo only): 855

Hazard Label: Corrosive

Special Provisions: A3, A803

ADG U.N. Number

1789

ADG Proper Shipping Name

HYDROCHLORIC ACID

ADG Transport Hazard Class

8

ADG Packing Group

II

Hazchem Code

2R

IERG Number

40

Special Precautions for User

Not available

IMDG Marine pollutant

No

Transport in Bulk

Not available

Section 15 - Regulatory Information

Regulatory Information

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety Regulations, Australia.

Classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Poisons Schedule

S6

Montreal Protocol

Not listed

Stockholm Convention

Not listed

Rotterdam Convention

Not listed

International Convention for the Prevention of Pollution from Ships (MARPOL)

Not listed

Agricultural and Veterinary Chemicals Act 1994

Not available

Basel Convention

Not available

Section 16 - Any Other Relevant Information

Date of Preparation

SDS Reviewed: August 2022

Supersedes: February 2019

Version Number

3.0

Literature References

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.

Standard for the Uniform Scheduling of Medicines and Poisons.

Australian Code for the Transport of Dangerous Goods by Road & Rail.

Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Code of Practice for Supply Diversion into Illicit Drug Manufacture.

National Code of Practice for Chemicals of Security Concern.

Agricultural Compounds and Veterinary Chemicals Act.

International Agency for Research on Cancer (IARC) Monographs.

Montreal Protocol on Substances that Deplete the Ozone Layer.

Stockholm Convention on Persistent Organic Pollutants (POPs).

Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International

Trade.

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.

International Air Transport Association (IATA) Dangerous Goods Regulations.

International Maritime Dangerous Goods (IMDG) Code.

Workplace exposure standards for airborne contaminants.

Adopted biological exposure determinants, American Conference of Industrial Hygienists (ACGIH).

Globally Harmonised System of Classification and Labelling of Chemicals (7th revised edition).

Code of Practice: Managing Noise and Preventing Hearing Loss at Work.

Contact Person/Point

Emergency Phone Number (24h)

AU: 1800 638 556, NZ: 0800 154 666

END OF SDS

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