SAFETY DATA SHEET

HYDROCHLORIC ACID

Infosafe No.: LQ1TY
ISSUED Date : 08/02/2019
ISSUED by: BONDALL PTY LTD

1. IDENTIFICATION

GHS Product Identifier
HYDROCHLORIC ACID

Company Name
BONDALL PTY LTD (ABN 27 008 734 996)

Address
Australia: 113 Belmont Avenue
Belmont, WA 6104 Australia

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

Emergency Contact Name
Bondall Direct Contact : Nathan Ayadurai 0438 916 539

Recommended use of the chemical and restrictions on use
Swimming pool cleaner, pH neutraliser.
General chemical - boiler remover, ore reduction, pickling and metal cleaning, laboratory reagent.

Other Names

Name	Product Code
POOL ACID	

2. HAZARD IDENTIFICATION

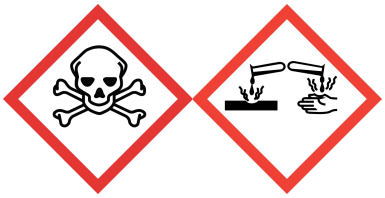
GHS classification of the substance/mixture
Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety Regulations, Australia.
Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)
Acute Toxicity - Oral: Category 4
Skin Corrosion/Irritation: Category 1B
Eye Damage/Irritation: Category 1
Acute Toxicity - Inhalation: Category 3
STOT Single Exposure: Category 3 (respiratory tract irritation)

Signal Word (s)
DANGER

Hazard Statement (s)
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.

H331 Toxic if inhaled.
H335 May cause respiratory irritation.

Pictogram (s)
Skull and crossbones,Corrosion



Precautionary statement – Prevention
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash contaminated skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement – Response
P310 Immediately call a POISON CENTER or doctor/physician.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P330 Rinse mouth.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/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.

Precautionary statement – Storage
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Precautionary statement – Disposal
P501 Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	Proportion
Hydrochloric acid	7647-01-0	25-30 %
Ingredients determined not to be hazardous, including water.		Balance

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 contact
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.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use carbon dioxide, dry chemical, foam, water fog or water mist.

Hazards from Combustion Products
Under fire conditions this product may emit toxic and/or irritating fumes and gases including carbon monoxide, carbon dioxide and 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.

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.

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. 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.

As a water based product, if spilt on electrical equipment the product will cause short-circuits.

7. HANDLING AND STORAGE

Precautions for Safe Handling
Toxic and corrosive liquid. Attacks skin and eyes. Causes burns. Avoid exposure. Exposure without protection must be prevented. Wear appropriate personal protective equipment and clothing to prevent exposure. Use in designated areas with local exhaust ventilation. DO NOT store or use in confined spaces. Build up of mists or vapours in the atmosphere must be prevented. Keep containers tightly closed. Do not smoke. Maintain high standards of personal hygiene i.e. washing hands prior to eating, drinking, smoking or using 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 and the Australian Standard AS/NZS 4452 The storage and handling of toxic substances.

8. EXPOSURE CONTROLS/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 Limit Values
No biological limits allocated.

Appropriate Engineering Controls
This substance is toxic and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. Alternatively, a process enclosure system such as a fume cupboard should be employed. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn. If local exhaust ventilation is used, ensure sufficient air is replaced to compensate the air that has been removed.

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.

Eye 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Properties	Description	Properties	Description
Appearance	Clear fuming liquid	**Colour**	Colourless to yellow
Odour	Sharp, irritating pungent acrid hydrogen chloride gas.	**Decomposition Temperature**	Not available
Freezing Point	-63 to -27°C	**Boiling Point**	91 - 98°C
Solubility in Water	Miscible with water	**Specific Gravity**	1.18
pH	<1	**Vapour Pressure**	11 - 115 at 20°C
Vapour Density (Air=1)	1.26	**Flash Point**	Not available
Flammability	Non-combustible liquid	**Auto-Ignition Temperature**	Not available
Flammable Limits - Lower	Not available	**Flammable Limits - Upper**	Not available

10. STABILITY AND REACTIVITY

Chemical Stability
Stable under normal conditions of storage and handling.

Reactivity and Stability
Reacts with incompatible materials.

Conditions to Avoid
Extremes of temperature, moisture and direct sunlight. Protect from freezing.

Incompatible materials
Strong oxidizing agents, alkalis and most metals.

Hazardous Decomposition Products
Thermal decomposition may result in the release of toxic and/or irritating fumes and gases including carbon monoxide, carbon dioxide and hydrogen chloride.

Possibility of hazardous reactions
Contact with metals may liberate hydrogen gas. Contact with oxidizing agents may liberate chlorine gas. Contact with water causes exothermic reaction.

Hazardous Polymerization
Not available

11. TOXICOLOGICAL INFORMATION

Toxicology Information
Toxicity data for material given below.

Acute Toxicity - Oral
LD50 (Rat): 900 mg/kg

Acute Toxicity - Inhalation
LC50 (Rat): 3124 ppm/1h
LC50 (Mouse): 1108 ppm/1h

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

Inhalation
Toxic if inhaled. Inhalation may cause headaches, impairment of judgement and in extreme cases can lead to unconsciousness or death. Inhalation will result in respiratory irritation and possible harmful corrosive effects including lesions of the nasal septum, pulmonary edema, pneumonitis and emphysema.

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

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

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.

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 (Mosquito fish): 282 mg/L/24h

Acute Toxicity - Other Organisms
LC50 (Shore crab): 240 mg/L/48h
LC50 (Sand shrimp): 260 mg/L/48h

13. DISPOSAL CONSIDERATIONS

Disposal considerations
The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations.

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

U.N. Number
1789

UN proper shipping name
HYDROCHLORIC ACID

Transport hazard class(es)
8

Packing Group
II

Hazchem Code
2R

IERG Number
40

IMDG Marine pollutant
No

Transport in Bulk
Not available

Special Precautions for User
Not available

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

Australia (AICS)
All components of this product are listed on the Australian Inventory of Chemical Substances (AICS) or exempted.

16. OTHER INFORMATION

Date of preparation or last revision of SDS
SDS amended: May 2019
1. Identification

SDS Reviewed: February 2019
Supersedes: November 2012

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

END OF SDS