1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **Hydrochloric Acid**

Recommended Use: Decreasing pH in pools and spas.

Supplier: Big Bubble
ABN: 51 290 656 636

Street Address: 18 Elliott Street
Midvale
Western Australia

Telephone Number: +61 08 9274 1992

Poisons Information Centre: **131 126 Australia**

2. HAZARDS IDENTIFICATION

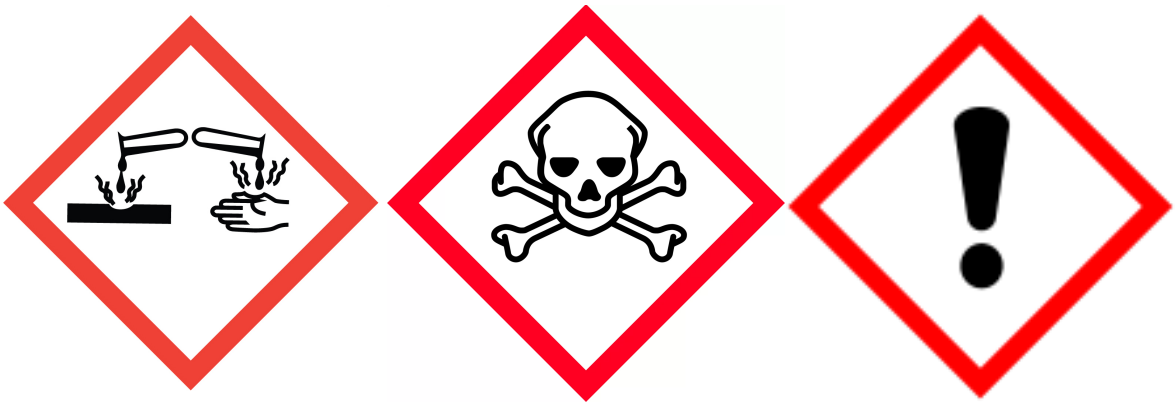
Road and Rail; Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; DANGEROUS GOODS.

Globally Harmonised System

Hazard Classification
Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Hazard Categories Skin corrosion – category 1B
Specific target organ toxicity (single exposure) – category 3

Pictogram



Name of pictogram Corrosion, Skull and Crossbones, Exclamation Mark

Signal Word Danger

Hazard Statements **H290** May be corrosive to metals.
H314 Causes severe skin burns.
H331 Toxic if inhaled.
H335 May cause respiratory irritation.

H401 Toxic to aquatic life.

Precautionary Statement

Prevention

P234 Keep only in original container.
P260 Do not breathe fumes, mists, vapours, or spray.
P264 Wash contact areas thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves, protective clothing, and eye or face protection.

Response

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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 CENTRE or doctor/physician.
P363 Wash contaminated clothing before reuse.
P370 + P378 Not combustible. Use extinguishing media suited to burning materials. Water fog or fine spray is the preferred medium for large fires.
P390 Absorb spillage to prevent material damage.

Storage

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P406 Store in a corrosive resistant container with a resistant inner liner.

Disposal

P501 Dispose of contents and containers to landfill.

Poisons Schedule: Schedule 6

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion
Hydrochloric acid	7647-01-0	28 – 34 %
Ingredients determined not to be hazardous		Balance %

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor at once.

Ingestion: IF SWALLOWED: Do NOT induce vomiting; rinse mouth thoroughly with water and contact a Poisons Information Centre. Urgent hospital treatment is likely to be needed.

Eye Contact: IF IN EYES: Immediately flush contaminated eye(s) with water while holding eyelid(s) open. Remove contact lenses if present and easy to

	do. Continue rinsing for at least 15 minutes. Neutral saline solution may be used as soon as it is available. Take care not to rinse contaminated water into unaffected eye or onto face. Call a Poison Information Centre or doctor urgently.
Skin Contact:	IF ON SKIN (or hair): Seek urgent medical attention. Flush contaminated area with water, gently flowing for at least 15 minutes. Under running water, remove contaminated clothing, shoes, and leather goods (watchbands, belts).
Inhalation:	IF INHALED: Contact a Poisons Information Centre or doctor/physician immediately. Remove source of contamination or move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. DO NOT allow victim to move about unnecessarily. Symptoms of pulmonary oedema can be delayed up to 48 hours after exposure.
Medical attention and special treatment:	Show medical personnel this SDS and take their advice. Treat symptomatically.

5. FIRE FIGHTING MEASURES

General	If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out.
Flammability Conditions	Material does not burn.
Suitable Extinguishing Media:	Water fog or fine spray is the preferred medium for large fires.
Fire and Explosion Hazards	There is little risk of an explosion from this product if commercial quantities are involved in a fire. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids.
Hazardous combustion products:	Fire decomposition products from this product may be toxic if inhaled. Produces hydrogen chloride gas.
Precautions for fire fighters and special protective equipment:	Aim to dilute material with large quantities of water. If practical, contain diluted material and prevent from entering drains and water courses. Wear positive pressure self-contained breathing apparatus (SCBA) and liquid-tight chemical protective clothing.

Auto Ignition temperature:	No Data Available
Decomposition Temperature:	No Data Available
Flammability:	No Data Available
Flash Point:	No Data Available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Ensure adequate ventilation. Do not touch or walk through spilled material – Slippery when spilt! Avoid breathing fumes and contact with eyes, skin, and clothing.
Protective equipment:	Use personal protective equipment as required (see SECTION 8).
Emergency procedures:	Evacuate the spill area and deny entry to unnecessary and unprotected personnel.
Environmental Precautions:	Prevent spillage from entering drains or water courses. Advise emergency services if significant quantities of material enter drains.
Methods and materials for Containment and clean up:	Stop leak if safe to do so and contain spill. Absorb onto sand, vermiculate, or other suitable absorbent material. If spill is too large or absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Because of the corrosiveness of this product, special personal care should be taken in any cleanup operation. Sweep up and shovel or collect recoverable product into labelled containers for disposal (see SECTION 13). After spills, wash area preventing runoff from entering drains. Contaminated area may be neutralised by washing with weak or dilute alkali. Baking soda, washing soda, and limestone are suitable.

7. HANDLING AND STORAGE

This material must be stored, maintained and used in accordance with the relevant regulations.

Conditions for safe storage:	This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport, and storage of this schedule of poison. Store in a cool, well-ventilated area. Check container periodically for corrosion and leaks. Containers should be kept closed to minimise contamination. Keep away from incompatible materials.
Precautions for safe handling:	Safety showers and eye wash facilities should be provided within the immediate work area. Keep exposure to this product to a minimum, and minimise the quantities kept at work areas. Use personal protective equipment as required (see SECTION 8).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure control measures:	Safe Work Australia Exposure Limits: TWA = 7.5 mg/m^3
Biological Monitoring	No information available.
Engineering Controls	This product should only be used in a well-ventilated area. If natural ventilation is inadequate, use of a fan is suggested.

Personal Protective Equipment	
Eye and Face	Your eyes must be completely protected from this product by splash resistant goggles with face shield. All surrounding skin areas must be covered.
Skin	Because of the dangerous nature of this product, make sure that all skin areas are completely covered by impermeable gloves, overalls, hair covering, apron, and face shield. Protective clothing should be made from the following materials: rubber, nitrile, butyl rubber, neoprene, Teflon.
Respiratory	Wear respiratory protection in case of inadequate ventilation or an inhalation risk exists. Recommended: particulate respirator (refer AS/NZS 1715 & 1716).

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Colour:	Colourless
Odour:	Characteristic sharp, irritating odour
pH:	1.0 (approx.)
Solubility:	Completely soluble
Auto Ignition temperature:	No Data Available
Decomposition Temperature:	No Data Available
Evaporation Rate:	No Data Available
Flammability:	No Data Available
Flash Point:	No Data Available
Boiling Point:	71 – 84˚C at 100 kPa
Melting/Freezing Point:	-43 - -36˚C
Odour Threshold:	No Data Available
Partition coefficient: n-octanol/water	No Data Available
Relative Density:	No Data Available
Upper Flammibility Limit	No Data Available
Lower Flammability Limit:	No Data Available
Explosive limits:	No Data Available
Vapour density:	No Data Available

Vapour pressure;	No Data Available
Viscosity:	No Data Available
Biopersistence:	No Data Available
Crystallinity:	No Data Available
Dustiness:	No Data Available
Particle size:	No Data Available
Redox potential:	No Data Available
Release of invisible flammable vapours and gases	No Data Available
Saturated Vapour Concentration	No Data Available

10. STABILITY AND REACTIVITY

Chemical stability:	Inorganic acids react with inorganic and organic bases such as amines to form salts. They also react with metals liberating hydrogen gas. These reactions are often rapid and typically liberate much heat. They can also decompose many organic materials such as esters, in a reaction called hydrolysis.
Conditions to avoid:	This product should be kept in a cool place, preferably below 30˚C. Keep containers tightly closed. Containers should be kept dry. Keep containers and surrounding areas well ventilated.
Incompatible materials:	Bases, oxidising agents, zinc, tin, aluminium and their alloys, other materials reactive with extremely strong acids.
Hazardous decomposition products:	Hydrogen chloride gas.
Hazardous reactions or Polymerisation:	This product will not undergo polymerisation reactions.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion:	Significant oral exposure is considered to be unlikely. However, this product is very corrosive to the gastrointestinal tract. Capable of causing severe burns with deep ulceration, and can penetrate deep layers of skin resulting

in third degree burns. Corrosion will continue until product is removed or neutralised. Severity depends on concentration and duration of exposure.

Eye contact: This product is very corrosive to eyes. It will quickly cause severe pain, and corrosion of the eye and surrounding facial tissues. Unless exposure is immediately treated, permanant blindness and facial scarring will occur.

Skin contact: Available data shows that this product is very corrosive to the skin. Capable of causing severe burns with deep ulceration and can penetrate deep layers of skin resulting in third degree burns. Corrosion will continue until product is removed or neutralised. Severity depends on concentration and duration of exposure. Burns may not be immediately painful; the onset of pain may be minutes or hours.

Inhalation: Available data shows that the product is toxic, but symptoms are not available. In addition, product is an inhalation irritant. Symptoms may include headache, irritation of nose and throat and increase secretion of mucous in the nose and throat.

Carcinogenity: Not expected to be carcinogenic.

Mutagenicity: Not expected to be mutagenic.

Reproductive: Not expected to impair fertility.

12. ECOLOGICAL INFORMATION

Ecotoxicity Salts, acids, and bases are typically diluted and neutralised when released to the environment in small quantities. However, until diluted or neutralised it will kill all aquatic organisms it contacts due to extreme pH.

Persistence and degradability: No information available.

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal methods: Dispose of in accordance with all local, state and federal regulations.
All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility.
Or refilled at Big Bubble in Midvale.

14. TRANSPORT INFORMATION

Road and Rail Transport
Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; DANGEROUS GOODS.

UN number: 1789

Proper shipping name:	HYDROCHLORIC ACID
DG Class	8, Corrosive Substances
Packing group	II
Hazchem	2R

Marine Transport
Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

UN number:	1789
Proper shipping name:	HYDROCHLORIC ACID
DG Class	8, Corrosive Substances
Packing group	II
Hazchem	2R

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

UN number:	1789
Proper shipping name:	HYDROCHLORIC ACID
DG Class	8, Corrosive Substances
Packing group	II
Hazchem	2R

15. REGULATORY INFORMATION

Poisons Schedule: Schedule 6

16. OTHER INFORMATION

Revision date: 27/11/2024
Reason for issue: Update SDS
Key/Legend:
< Less Than
> Greater Than
AICS Australian Inventory of Chemical Substances
atm Atmosphere
CAS Chemical Abstracts Service (Registry Number)
cm2 Square Centimetres
CO2 Carbon Dioxide
COD Chemical Oxygen Demand
deg C (**°C**) Degrees Celcius
g Grams
g/cm3 Grams per Cubic Centimetre
g/l Grams per Litre
HSNO Hazardous Substance and New Organism
IDLH Immediately Dangerous to Life and Health
immiscible Liquids are insoluable in each other.
inHg Inch of Mercury
inH2O Inch of Water
K Kelvin

kg Kilogram
kg/m3 Kilograms per Cubic Metre
LC50 LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.
LD50 LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.
ltr or **L** Litre
m3 Cubic Metre
mbar Millibar
mg Milligram
mg/24H Milligrams per 24 Hours
mg/kg Milligrams per Kilogram
mg/m3 Milligrams per Cubic Metre
Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.
mm Millimetre mmH2O Millimetres of Water
mPa.s Millipascals per Second
N/A Not Applicable
NIOSH National Institute for Occupational Safety and Health
NOHSC National Occupational Heath and Safety Commission
OECD Organisation for Economic Co-operation and Development
PEL Permissible Exposure Limit
Pa Pascal
ppb Parts per Billion
ppm Parts per Million
ppm/2h Parts per Million per 2 Hours
ppm/6h Parts per Million per 6 Hours
psi Pounds per Square Inch
R Rankine
RCP Reciprocal Calculation Procedure
STEL Short Term Exposure Limit
TLV Threshold Limit Value tne Tonne
TWA Time Weighted Average
ug/24H Micrograms per 24 Hours
UN United Nations
wt Weight

This material safety data sheet has been prepared by Midland Chemicals

This MSDS 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. No liability is accepted whether direct or indirect from its application since the conditions of final use are outside Midland Chemicals control. The end user is obliged to conform to relevant government regulations and/or patent laws applicable in their respective States of Countries.