HURST SCIENTIFIC

Safety Data Sheet
Hydrochloric Acid (0.1-10%)

SECTION 1: Identification

GHS Product identifier

Product name	Hydrochloric Acid (0.1-10%)
Product number	HCL0.1-10%-500M, 1L, 2.5L, 5L
Brand	Hurstchem

Other means of identification

0.1 Normal Hydrochloric acid, 1N Hydrochloric acid.

Recommended use of the chemical and restrictions on use

Laboratory Reagent

Supplier's details

Name	Hurst Scientific
Address	2/36 Hensbrook Loop 6112 Forrestdale WA Australia
Telephone	1300 778 068
email	sales@hurstscientific.com.au

Emergency phone number

Australian Poisons Information Centre 131 126
Australian Emergency Services 000

SECTION 2: Hazard identification

General hazard statement

Classified as a **Hazardous** substance according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.
Classified as a **Dangerous goods** according to the ADG Code for the Transport of Dangerous Goods by Road and Rail (7th Edition).

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 7

- Corrosive to metals, Cat. 1

GHS label elements, including precautionary statements

Pictograms

1. Corrosion

Signal word	**Warning**

Hazard statement(s)

H290	May be corrosive to metals

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.
P501	Dispose of contents/container to …

SECTION 3: Composition/information on ingredients

Mixtures

1. Hydrochloric acid

Concentration	0.1 - 10 %
CAS no.	7647-01-0

2. Water

Concentration	Balance
CAS no.	7732-18-5

SECTION 4: First-aid measures

Description of necessary first-aid measures

If inhaled	Evacuate to fresh air immediately. If unconscious place in recovery position, provide artificial respiration if breathing ceases.
In case of skin contact	Remove contaminated clothing and wash affected area with soap and water thoroughly. Seek medical attention.
In case of eye contact	Flush eyes with copious amounts of water for at least 15 minutes. Seek immediate medical attention.
If swallowed	DO NOT induce vomiting. Rinse mouth out with water. Seek immediate medical attention.

Personal protective equipment for first-aid responders

Eye wash station, safety shower and First Aid kit.

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

Treat symptomatically.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Use media suitable for other material involved in fire.

Specific hazards arising from the chemical
Toxic gases may evolve (Hydrogen Chloride).

Special protective actions for fire-fighters
Wear SCBA (Self-Contained Breathing Apparatus) and full protective equipment.

Further information
Hazchem code None allocated.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
Wear appropriate protective clothing. Ensure adequate ventilation. Avoid breathing in vapours, mist or gas. If possible contain the spill. Evacuate all unnecessary personnel.

Methods and materials for containment and cleaning up
Absorb with vermiculite or similar and place into a suitably labelled container. Dispose of waste according to local authority guidelines. Wash the affected area with a large volume of water. Do not contaminate drains or waterways.

SECTION 7: Handling and storage

Precautions for safe handling
Use only in an adequately ventilated area. Avoid breathing in mists or vapours. Wear appropriate protective clothing to avoid any exposure and practice good personal hygiene.

Conditions for safe storage, including any incompatibilities
Store in a cool, dry, well-ventilated area. Keep container tightly closed. Metal containers must be lined.

SECTION 8: Exposure controls/personal protection

Control parameters

Hydrochloric acid 7.5mg/m3, 5ppm TWA

Appropriate engineering controls
Ensure adequate ventilation to maintain airborne concentrations below national exposure standards.

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

Eye/face protection
Safety glasses or goggles,

Skin protection
Chemical-resistant gloves and laboratory coat.

Body protection
Biological Limit Values Not available for this product.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Color	Clear
Odor	No distinct odour
Melting point/freezing point	<0°C
Boiling point or initial boiling point and boiling range	100°C
Flammability	Non-flammable. Contact with strong alkalis may generate heat.
Lower and upper explosion limit/flammability limit	Not applicable
pH	Acidic
Solubility	Water soluble
Vapor pressure	18mmHg @ 20°C
Density and/or relative density	Not available
Relative vapor density	1.6

SECTION 10: Stability and reactivity

Reactivity
Non-reactive under recommended conditions for use and storage.

Chemical stability
Stable under recommended conditions for use and storage.

Possibility of hazardous reactions
Polymerisation will not occur.

Conditions to avoid
Metals and incompatibles.

Incompatible materials
Metals. Will react with water or steam to produce toxic and corrosive fumes. Keep away from strong oxidising agents, strong bases, cyanides and sulphides. Avoid contact with metals. Reacts with zinc, brass, galvanised iron, aluminium, copper and copper alloys.

Hazardous decomposition products
Toxic gases (Hydrogen Chloride) may evolve.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
HEALTH EFFECTS:
ACUTE:
Eye Contact Will irritate the eyes, resulting in pain, stinging, redness, lacrimation and possible corneal burns (and blindness).
Skin Contact Will cause burns and irritation, resulting in pain, redness and swelling. Can also cause dermatitis.
Inhalation Will cause irritation to the mucous membranes of the nose, throat and respiratory system.
Ingestion Will cause burns, nausea, vomiting and abdominal pain.

Skin corrosion/irritation
Slight irritation.

Serious eye damage/irritation
Slight irritation.

Respiratory or skin sensitization
No classification available.

Germ cell mutagenicity
No classification available.

Carcinogenicity
Category 3 Carcinogen according to IARC monographs. Not classifiable as to its carcinogenicity to humans.

Reproductive toxicity
No classification available.

Specific target organ toxicity (STOT) - single exposure
No classification available.

Specific target organ toxicity (STOT) - repeated exposure
No classification available.

Aspiration hazard
No classification available.

Additional information
TOXICITY DATA Hydrochloric Acid: LC50 (Inhalation, Rat): 3124ppm

SECTION 12: Ecological information

Toxicity
Not available.

Persistence and degradability
Not available.

Bioaccumulative potential
Not expected to bio-accumulate.

Mobility in soil
Not available.

Other adverse effects
Environmental fate (exposure) Do not contaminate drains and waterways.

SECTION 13: Disposal considerations

Disposal methods

Product disposal
Dispose of in accordance with local authority guidelines. Empty containers may still represent a hazard.

Packaging disposal
Dispose of in accordance with local authority guidelines. Empty containers may still represent a hazard.

Other disposal recommendations
Special precautions Nil.

SECTION 14: Transport information

UN Number	1789
UN Proper Shipping Name	Hydrochloric Acid
Transport hazard class(es)	8
Packing group	III

Special precautions for user
Class 8 Corrosives are incompatible in a placard load with any of the following: -
Class 1
Class 4.3
Class 5
Class 6, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids
Class 7

SECTION 15: Regulatory information

Chemical Safety Assessment

- Poison Schedule: S5.
- TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight hour working day, for a five day week.

SECTION 16: Other information

Further information/disclaimer
This SDS is prepared in accordance with the Safe Work Australia, Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice, (2011). The information contained within is believed to be accurate at the date of preparation/review. hurst Scientific makes no claims of the accuracy or completeness of the information and excludes all liability for any loss or damage related to the supply or use of the information in this material safety data sheet. It is recommended the user make their own determinations as to the suitability of the information provided to the application in which the product is to be used.

Preparation information
References
1. Safe Work Australia, Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice, (2011).
2. Safe Work Australia, National Code of Practice for the Labelling of Workplace Hazardous Chemicals (2015).
3. Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants (2013)
4. National Transport Commission Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code); Canprint: Canberra (2007), Volume 1, 7th Edition.
5. Standards Australia, Dangerous Goods Initial Emergency Response Guide: Australian Handbook (SAA/SNZ HB76); Homebush (2004).