



Safety Data Sheet

Date of Issue: 01.07.2021

Date of Expiry: 01.07.2026

1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name : ECP Limited
Address : PO Box 34125, Birkenhead, Auckland 0746
Telephone : +64 9 480 4386
Facsimile : +64 9 480 4385
Emergency phone number : 0800 243 622 (24 hours)

Product	Hydrochloric acid 0.1M / 0.1N	Code	27007
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Recommended use : Laboratory Investigations

2: Hazard's identification

GHS classification of the substance/mixture

Corrosive to Metals : Category 1

Signal Word (s) : WARNING

Hazard Statement (s)

H290 May be corrosive to metals.

Pictogram (s) Corrosion



Precautionary statement – Prevention.

P234 Keep only in original container.

Precautionary statement – Response.

P390 Absorb spillage to prevent material damage

Precautionary statement – Storage.

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

Precautionary statement – Disposal.

P501 Dispose of contents/container according to local, state and federal regulations.

3: Composition/information on ingredients

Chemical Characterization : Liquid

Information on Composition : Aqueous solution of the gas hydrogen chloride

Name	CAS	Proportion
Water	7732-18-5	➤ = 90-99.9 %
Hydrochloric acid	7647-01-0	➤ = 0.1-9.9 %

4: First aid measures

Inhalation

Remove from exposure, rest and keep warm. If symptoms persist, obtain medical attention.

Ingestion

Rinse mouth thoroughly with water immediately. Give water to drink. DO NOT induce vomiting. Seek medical advice if effects persist.

Skin

Wash affected areas with copious quantities of water immediately. Remove contaminated clothing. If irritation occurs seek medical advice.

Eye Contact

Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. Seek medical attention.

First aid Facilities

Maintain eyewash fountain and drench facilities in work area.

Advice to Doctor

Treat symptomatically as for acids.

Other Information

For advice, contact a Poisons Information Centre (Phone e.g., Australia 13 1126; New Zealand 0800 764 766) or a doctor.

5: Firefighting 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.

Hazchem Code : 2R

6: Accidental release measures**Spills and Disposal**

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.

Personal Protection

Use personal protective equipment listed in Section 8.

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.

Corrosiveness

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.

Storage Temperatures

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

8: Exposure controls/personal protection

8.1 Control parameters

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8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards.

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type or respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards.

9: Physical and chemical properties

Form	: Liquid
Appearance	: Clear, colourless to light yellow liquid.
Odour	: Odourless to slight, characteristic, irritating odour.
Melting Point	: Approximately 0 °C (based on data for water); weighted average: - 2.32 °C (3%); -18 °C (10%).
Boiling Point	: Approximately 100 °C.
Solubility in Water	: Miscible (soluble) in all proportions.
Solubility in Organic solvent	: Soluble in alcohols, diethyl ether and benzene; insoluble in hydrocarbons.
Specific Gravity	: Approximately 1.
pH	: For HCl solutions: 0.1 (1.0 N), 1.1 (0.1 N), 2.02 (0.01 N).
Vapour Pressure	: Essentially the same as water; 0.527 Pa (10%).
Vapour Density (Air=1)	: Essentially the same as water (0.62).
Evaporation Rate	: Essentially the same as water (0.36) (BuAc=1).
Flammability	: Non-combustible material.

10: Stability and reactivity

Chemical Stability

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

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, silicide's, cyanides, sulfides and phosphide.

11: Toxicological information

Ingestion

May cause burns to mouth, throat and stomach.

Inhalation

May be harmful if inhaled.

Skin

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

Eye

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

Carcinogenicity

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

Mutagenicity

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

12: Ecological information

Ecotoxicity

Quantitative data on the ecological effect of this product are not available.

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

Environmental Protection

Do not allow to enter waters, waste water, or soil!

13: Disposal considerations

Disposal Considerations

Dispose of according to relevant local, state and federal government regulations.

14: Transport Information Table

	ADR/RID – European packaging certification	IMDG International Maritime Dangerous Goods Code	IATA – DGR International Air Travel Association – Dangerous Goods Regulations
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14.1	UN Number	1789	1789	1789
14.2	UN Proper Shipping name	HYDROCHLORIC ACID	HYDROCHLORIC ACID	Hydrochloric acid
14.3	Transport Hazard Class	8	8	8
14.4	Packaging group	III	III	III
14.5	Environmental Hazards	No	No	No
14.6	Special precautions for user	None		
14.7	Incompatible materials	Strong oxidizing agents		

15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulatory information

HSNO Group Standard Approval: not required

16: Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. However, the information is not a guarantee expressed or implied, with respect to such information, and we assume no liability resulting from its use. Anyone using the chemical described here should ensure that he or she has the appropriate training and has the expertise and any equipment required for safe handling. If clarification or further information is required, please contact ECP Ltd or refer to the official handler of dangerous goods within your own company. The user should also make their own investigations to determine the suitability of the product for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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