
MATERIAL SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name: HYDROCHLORIC ACID 0.1M (0.1N) SOLUTION, HYDROCHLORIC ACID 0.5M (0.5N) SOLUTION
Synonyms: HYDROGEN CHLORIDE
Produce Code: REA115, REA116
Brand: Solmedia Ltd

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses – Manufacture of substances. Laboratory chemicals.

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Solmedia Ltd.
- Address of Supplier: Unit 2, Vernon Drive
Battlefield Enterprise Park
Shrewsbury
SY1 3TF
UK
- Telephone: 0844 80 80 900
- Email: labsupplies@solmedialtd.com

1.4 Emergency telephone number

Emergency Phone # +44 (0)844 80 80 900

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification under CLP: Met. Corr. 1: H290

Classification under CHIP: Xi: R36/37/38

Most important adverse effects:

May be corrosive to metals.

2.2 Label elements

Label elements under CLP:

Hazard statements: H290: May be corrosive to metals.

Signal words: Warning

Hazard pictograms: GHS05: Corrosion



Precautionary statements:

P234: Keep only in original container.

P390: Absorb spillage to prevent material damage.

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

2.3 Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical identity: HYDROCHLORIC ACID 0.1M (0.1N) SOLUTION

Contains: Molecular Formula: HCl

Molecular Weight: 36.46 g/mol.

3.2 Mixtures

Hazardous ingredients Classification according to Regulation (EC) No. 1272/2008 [CLP]

			Classification (Regulation (EC) No 1272/2008 [CLP])	
Hazardous Components		Amount [%]	Hazard class/ Hazard category	Hazard Statements
Name:	Hydrochloric Acid	<1-10%	SKIN CORR. CAT. 1B. EYE DAM./IRRIT. CAT. 1.	H290, H314, H318, H335, H303
CAS NO.	7647-01-0			
EC-NO.	231-595-7			
EU REACH-REG. NO.	01-2119484862- 27-0184			
Name:	Deionised water	>90-99%	N/A	N/A
CAS NO.	7732-18-5			
EC NO.	231-791-2			

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious

person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

After inhalation Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

In case of skin contact After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

After eye contact In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

In case of ingestion If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting. Give nothing to eat or drink

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

4.4 Self-protection of the first aider

First aider: Pay attention to self-protection!

4.5 Information to physician

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2 Special hazards arising from the substance or mixture

Hydrogen chloride gas.

5.3 Advice for firefighters

Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes,

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Hydrochloric acid solution 0.1M (0.1N), 0.5M (0.5N)
Solution

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Wear suitable respiratory protection if necessary. Turn leaking containers leak-side up to prevent the escape of liquid. Refer to section 8 of SDS for personal protection details.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Discharge into environment must be avoided. Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

Refer to section 8 of SDS

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling requirements: Avoid inhalation of vapour or mist. For precautions see section 2.2

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed in a dry and well-ventilated place. Store in correctly banded mild steel tanks, or plastic drums/IBC's. Solution will solidify at low temperatures; heated storage may be needed.

7.3 Specific end use(s)

No other specific uses stipulated other than the uses mentioned in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limits:

No data available

DNEL / PNEC No data available.

8.2 Exposure controls

Engineering measures: Handle in accordance with good industrial hygiene and safety practise. Wash hands before breaks and at the end of the workday.

Respiratory protection:	Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) 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 such as NIOSH (US) or CEN (EU).
Hand protection:	<p>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 application laws and good laboratory practises. Wash and dry hands.</p> <p>The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.</p> <p>Full contact - Material: Nitrile rubber. Minimum layer thickness: 0.11mm. Break through time: >480 minutes</p> <p>Splash contact - Material: Nitrile rubber. Minimum layer thickness: 0.11mm. Break through time: >480 minutes</p>
Eye protection:	Use equipment for eye protection tested and approved under appropriate government standards. Ensure eye bath is to hand.
Skin 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.
Environmental:	Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State:	Liquid
Colour:	Colourless
Odour:	Pungent
Solubility in water:	Soluble
Boiling point/range°C:	100

Hydrochloric acid solution 0.1M (0.1N), 0.5M (0.5N)
Solution

Melting point/range°C: 0

pH: < 1

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended transport or storage conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions will not occur under normal transport or storage conditions.

Decomposition may occur on exposure to conditions or materials listed below.

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Bases. Amines. Alkali metals. Metals

10.6 Hazardous decomposition products

In combustion emits toxic fumes. In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Toxicity values: No data available.

Symptoms / routes of exposure

Skin contact:	There may be irritation and redness at the site of contact.
Eye contact:	There may be pain and redness.
Ingestion:	There may be irritation of the throat.
Inhalation:	There may be irritation of the throat with a feeling of tightness in the chest.

Other information: RTECS: Not available

SECTION 12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

Biodegradable.

12.3 Bioaccumulative potential

No bioaccumulation potential.

12.4 Mobility in soil

Readily absorbed into soil.

12.5 Results of PBT and vPvB assessment

This product is not identified as a PBT/vPvB substance.

12.6 Other adverse effects

Negligible ecotoxicity.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company. Offer surplus and non-recyclable solutions to a licensed disposal company.

Disposal of packaging: Dispose of as unused product.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal

SECTION 14: Transport information

14.1 UN Number

UN1789

14.2 UN Proper Shipping Name

14.3 Transport Hazard Class

8

14.4 Packing Group

III

14.5 Environmental Hazards

Hydrochloric acid solution 0.1M (0.1N), 0.5M (0.5N)
Solution

No

Marine pollutant: No

14.6 Special Precautions for User

No special precautions

Tunnel code: E

Transport category: 3

SECTION 15: Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

SECTION 16: Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and 3: H290: May be corrosive to metals.

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Solmedia Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.