

SAFETY DATA SHEET

Hydrochloric Acid

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

1.1. Product identifier

Product name	Hydrochloric Acid
Product number	339253
Internal identification	FG201001
REACH registration notes	Not registered – not for sale in the EU
CAS number	7647-01-0
EU index number	017-002-01-X

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

Identified uses Laboratory reagent. Manufacture of substances.

1.3. Details of the supplier of the safety data sheet

Manufacturer Jubail Chemical Industries Company (JANA)
P.O.BOX - 11919
Jubail Industrial City - 31961
Saudi Arabia
+966 13 3478888 ext 351
+966 13 3476705
safety@nama.com.sa

Only Representative REACH 1907/2006/EC Article 8

1.4. Emergency telephone number

Emergency telephone JANA
Tel. +966 509058826

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Met. Corr. 1 - H290
Health hazards	Skin Corr. 1A - H314 STOT SE 3 - H335
Environmental hazards	Not Classified

2.2. Label elements

Pictogram



Signal word Danger

Hazard statements H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.

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Precautionary statements	P261 Avoid breathing vapour/ spray. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. 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 CENTER/ doctor.
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2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

Product name	Hydrochloric Acid
REACH registration notes	Not registered – not for sale in the EU
EU index number	017-002-01-X
CAS number	7647-01-0
Chemical formula	HCl 25 - 50 %

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	IF INHALED: Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Ingestion	IF SWALLOWED: Do not induce vomiting unless under the direction of medical personnel.
Skin contact	IF ON SKIN: Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention.
Eye contact	IF IN EYES: Continue to rinse for at least 15 minutes and get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure. See Section 11 for additional information on health hazards.
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4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	No data available.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Water spray, foam, dry powder or carbon dioxide.
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5.2. Special hazards arising from the substance or mixture

Specific hazards	Hydrogen chloride (HCl).
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5.3. Advice for firefighters

Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid inhalation of dust and vapours. Provide adequate ventilation. Evacuate area. Wear protective clothing as described in Section 8 of this safety data sheet.
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6.2. Environmental precautions

Environmental precautions	Do not discharge into drains or watercourses or onto the ground. Avoid contamination of ponds or watercourses with washing down water.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. Dispose of waste product or used containers in accordance with local regulations. Keep container tightly closed and dry.

6.4. Reference to other sections

Reference to other sections For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid inhalation of vapours and contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2. No specific requirements are anticipated under normal conditions of use.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Protective equipment



Eye/face protection

Wear tight-fitting, chemical splash goggles or face shield. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

To protect hands from chemicals, gloves should comply with European Standard EN374. Wear protective gloves made of the following material: Nitrile rubber. The selected gloves should have a breakthrough time of at least 8 hours. Avoid contact with skin. Remove contaminated clothing and wash the skin thoroughly with soap and water after work.

Other skin and body protection

Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate.

Respiratory protection

Wear self-contained breathing apparatus with full facepiece. If ventilation is inadequate, suitable respiratory protection must be worn. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. Gas and combination filter cartridges should comply with European Standard EN14387.

Environmental exposure controls

Do not release into the environment.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance Clear liquid.

Colour Colourless to pale yellow. Brownish.

Odour threshold No data available.

pH pH (concentrated solution): <1

Melting point -30°C

Initial boiling point and range >100°C

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Flash point	Not applicable.
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Decomposition temperature:	
Self-igniting:	
Danger of explosion:	
Specific gravity	
Vapour pressure	227 hPa @ 21,1°C 547 hPa @ 37,7°C
Density	
Vapour density	No data available.
Relative density	1,2 g/cm ³ @ 25°C
Evaporation rate:	
Solubility in / Miscibility with water:	
Auto-ignition temperature	No data available.
Decomposition Temperature	No data available.
Viscosity	No data available.
Viscosity Dynamic:	
Explosive properties	No data available.
Oxidising properties	No data available.
VOC (EC)	0%
VOC (CH)	0%

9.2. Other information

Other information No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No data available.

10.2. Chemical stability

Stability Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No data available.

10.4. Conditions to avoid

Conditions to avoid No data available.

10.5. Incompatible materials

Materials to avoid Amines. Strong acids. Alkali metals. Potassium. 14. Permanganates Some metals.

10.6. Hazardous decomposition products

Hazardous decomposition products No data available.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects No data available.

Skin corrosion/irritation

Human skin model test Causes severe burns.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Respiratory sensitisation

Respiratory sensitisation No data available.

Germ cell mutagenicity

Genotoxicity - in vitro No data available.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met. Does not contain any substances known to be carcinogenic.

IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.

Reproductive toxicity

Reproductive toxicity - fertility No data available.

Specific target organ toxicity - single exposure

STOT - single exposure High concentrations may cause severe lung damage.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No data available.

Aspiration hazard

Aspiration hazard No data available.

General information RTECS.

Medical symptoms Symptoms following overexposure may include the following: Coughing, chest tightness, feeling of chest pressure. Coughing. Pulmonary oedema, frothy sputum. Tracheobronchitis, pulmonary oedema. Pneumonitis (inflammation of lung tissue).

SECTION 12: Ecological Information

12.1. Toxicity

Acute toxicity - aquatic invertebrates LC₅₀, 96 hours: 282 mg/l, *Gambusia affinis* (Mosquito fish)

12.2. Persistence and degradability

Persistence and degradability No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

12.4. Mobility in soil

Mobility No data available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment No data available.

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12.6. Other adverse effects

Other adverse effects No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor.

European waste catalogue:

SECTION 14: Transport information

14.1. UN number

UN 1789

UN No. (IMDG) UN 1789

UN No. (ICAO) UN 1789

14.2. UN proper shipping name

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14.3. Transport hazard class(es)

8

IMDG class 8

IMDG subsidiary risk 8

ICAO class/division 8

14.4. Packing group

II

ADR/RID packing group II

IMDG packing group II

ICAO packing group II

Packing instruction,
passenger:

Packing instruction, cargo:

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

Special marking (ADR):

Special marking (IATA)

14.6. Special precautions for user

No data available.

IATA-Passenger Aircraft:

IATA-S.P.:

IMDG-Storage category

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

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ADR

Maximum net quantity per inner packaging

Maximum net quantity per outer packaging:

Transport Category

Tunnel Restriction code:

IMDG

Limited quantities (LQ) 1 ltr.

Expected quantities (EQ) E0

SECTION 15: Regulatory information

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

National regulations Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Guidance No data available.

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
DNEL: Derived No Effect Level.
CAS: Chemical Abstracts Service.
GHS: Globally Harmonized System.
IATA: International Air Transport Association.
IMDG: International Maritime Dangerous Goods.
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
ICAO: International Civil Aviation Organisation

SDS number 4555

Hazard statements in full

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.