



Safety Data Sheet

According to Regulation (EC) no. 1907/2006

Product Name
HYDROGEN CHLORIDE IN ISOPROPANOL

1.0 Chemical product and company identification

1.1 Product Identifier

MSDS Name:	HYDROCHLORIC ACID IN IPA
Substance name:	HYDROGEN CHLORIDE IN ISOPROPANOL
CAS No:	Not Assigned
PRODUCT CODE:	HY7P

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

Use of the Substance / Mixture: Laboratory Reagent

Recommended restrictions on use: Use only as above

1.3 Details of the supplier of the safety data sheet

Company Identification:
SOLUMETRICS LTD,
UNIT 1B SILEBY ROAD INDUSTRIAL ESTATE. BARROW ON SOAR, LEIC'S. LE12 8LP.
For information call. +44 (0)1509 815348
For emergencies call. +44 (0)1509 815348

2.0 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) no 1272/2008

Hazard Symbol / Category of Danger

H314
H335
H319
H315
H225
H336

Hazard Statements:

Causes severe skin burns and eye damage
MAY CAUSE RESPIRATORY IRRITATION
CAUSES SERIOUS EYE IRRITATION
CAUSES SKIN IRRITATION
HIGHLY FLAMMABLE LIQUID AND VAPOR
May Cause Drowsiness or dizziness

Hazard Symbol / Category of Danger

R11
R36
R38
R48/20

R63
R65
R67
R37
R34

Risk Phrases

Highly Flammable
Irritating to eyes
Irritating to skin
Harmful danger or serious damage to health by prolonged exposure by inhalation
Possible risk to the unborn child
Harmful, may cause lung damage if swallowed
Vapour may cause drowsiness and dizziness
Irritating to respiratory system
Causes Burns

For the full text of the R-Phrases in this section, see Section 16.

2.2 Label Elements

Labelling according to regulation (EC) No 1272/2008

HAZARDS SYMBOLS



Signal Word:

DANGER

Hazard Statements:

H314
H335
H319
H315
H225
H336

Causes severe skin burns and eye damage
MAY CAUSE RESPIRATORY IRRITATION
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HIGHLY FLAMMABLE LIQUID AND VAPOR
May Cause Drowsiness or dizziness

Precautionary statements

Prevention

P280 Wear Protective gloves/ protective clothing/ eye protection/ face protection

Response

P301 + P330 + P331 If swallowed: rinse mouth. Do NOT induce vomiting
 P303 + P361 + P353 If on Skin (or Hair): Remove/ Take off immediately all contaminated clothing, Rinse skin with water/ shower
 P305 + P351 + P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308 If exposed or concerned
 P310 Immediately call a POISON CENTER or doctor/ Physician

Hazardous components which must be listed on the label:**3.0 Composition/ Information on ingredients**

CAS No	CHEMICAL NAME	Risk Phrases	EINECS	%
3979-51-9	ISOPROPANOL - Alternative Names: 2 - Propanol	Flam Liq. 2 Eye irrit; STOT SE 3: H225 : H319, H336, F, Xi, R11, R36 - R67	223-616-3	75%
7647-01-10	Hydrochloric Acid - Alternative Names: HCL Hydrogen Chloride	R11, R36, R67	200-661-7	25%

3.1 Substances**Chemical Nature:**

Highly Corrosive and flammable
 Will burn skin and cause eye irritation
 Harmful - Danger of serious damage to health by prolonged exposure through inhalation
 Harmful - May cause lung damage if swallowed

4.0 First Aid measures**4.1 Description of first aid measures****General Advice****If Inhaled:**

Remove from exposure. If breathing stops or show sign of failing, give artificial respiration. Obtain medical attention urgently. Keep warm and at rest. If there is difficulty in breathing, give oxygen. Do not use mouth to mouth ventilation.

In Case of Skin contact:

Wash off immediately with plenty of water for at least 15 minutes. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty

In case of eye contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult an eye specialist immediately. Go to an ophthalmic hospital if possible

If Swallowed:

Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician immediately.

5.0 FIRE FIGHTING MEASURES**5.1 Extinguishing media****Suitable extinguishing Media:**

Foam, CO₂ (Carbon dioxide) or dry powder. Keep fire exposed containers cool by spraying with water.

5.2 Special hazards arising from the substance or mixture**Specific hazards during fire fighting:**

Highly flammable. Vapours may form explosive mixtures in air-take precautionary measures against static discharges. The vapour is heavier than air and may travel a considerable distance to a source of ignition and will flash back. Combustion will evolve toxic vapours. Heating of the sealed container may cause a pressure rise with a risk of explosion.

5.3 Advice for fire-fighters**Special protective equipment for fire-fighters:**

In the event of fire, wear self-contained breathing apparatus. Wear appropriate body protection (full protective suit)

6.0 Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Personal Precautions:

Ventilate the area to dispel possible toxic decomposition fumes. Wear appropriate protective clothing. Use personal protective equipment. Keep away unprotected persons. Danger of slipping if spilled. Avoid contact with skin and eyes. Do not breathe vapours or spray mist. For personal protection see section 8

6.2 Environmental precautions:

Contain and absorb using earth, sand or other inert material. Transfer into suitable containers for recovery or disposal. Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases

6.3 Methods and materials for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, Universal binders) Keep in suitable, closed containers for disposal.

Further Information:

Advise Authorities if spillage has entered water course or sewer or has contaminated soil or vegetation.

7.0 Handling and storage**7.1 Precautions for safe handling****Advice on safe handling:**

Keep containers tightly closed. Use personal Protective equipment. Provide sufficient air exchange and/ or exhaust in work rooms. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit. Avoid contact with the skin and the eyes. Avoid inhalation of vapour or mist. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.

Hygiene measures:

Keep away from sources or ignition, no smoking, take precautionary measures against static discharge. Keep away from food, drink and animal feeding stuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately. Avoid contact with the skin and the eyes. Do not breathe vapours or spray mist.

7.2 Conditions for safe storage, including any incompatibilities**Requirements for storage area containers:**

Storage area should be: well ventilated Stock tanks should be bunded and consideration should be given to vent system with a water scrubber to dispel fumes. Tanks should be equipped with airflow pipes directed into the base of the bund with a frost-protected seal to contain fumes. Do not store in Stainless steel, metal drums.

Advice on Protection Against fire and explosion:

Keep container tightly closed and in well ventilated area. Keep away from heat and direct sunlight. Store this product in a secure area to prevent unauthorised use. Avoid contact with Rubber and various plastics

Further information on storage conditions:

Keep tightly closed in a dry and cool place. Keep in well ventilated place.

Advice on common storage:

Keep away from food, drink and animal feeding stuffs.

8.0 Exposure controls/ personal protection**8.1 Control parameters**

Regulatory Basis	UK. EH40 Workplace Exposure Limits (WELs)
Regulatory List	EH40 WEL
Value Type	None
Value	None

8.2 Exposure controls

Engineering measures
Refer to protective measures listed in sections 7 and 8

Personal protective equipment

Respiratory protection**Advice:**

Use respirator with appropriate filter if vapours or aerosol are released.
 Recommended Filter Type
 Particle Filter: P2
 Particle Filter: P3

Hand Protection**Advice:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation
 Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact)

Acid Resistant and solvent Resistant Hand Protection
 Protective Gloves should be replaced at first signs of wear.

Eye Protection**Advice:**

Tightly fitting safety goggles - Ensure eye bath is available

Skin and Body Protection**Advice:**

Acid resistant protective clothing

Environmental exposure controls**General advice**

Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities for such cases

9.0 Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Form
Colour
Odour
Odour Threshold
PH

Liquid
 Clear Liquid
 Pungent Characteristic

Acidic pH

Freezing Point
Boiling Point
Flash Point

No Data
 No Data
 18 C

Water solubility
Ignition Temperature

Completely soluble
 Not applicable

10.0 Stability and reactivity

This product is stable

10.1 Reactivity**10.2 Chemical stability**

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions**Hazardous reaction:**

No Data

10.4 Conditions to avoid

High Temperatures

10.5 Incompatible materials**Materials to avoid:**

Bases / Alkalis
 Oxidising Agents

10.6 Hazardous decomposition products

No Data

11.0 Toxicological Information**11.1 Information on toxicological effects**

Hydrogen Chloride in ISOpropanol
Acute toxicity
Oral

Inhalation**Remarks**

Inhalation may cause pain in respiratory system, sneezing coughing and difficulty in breathing.

Irritation**Skin**

Result – Very Corrosive

Eyes

Result – Very Corrosive
Remarks – Risk of serious damage to eyes

Further Information

Ingestion may cause irritation to the gastrointestinal tract. May cause vomiting and diarrhoea. Larger doses may produce adverse effects on the central nervous system

12.0 Ecological Information**12.1 Toxicity****Hydrogen Chloride in ISOpropanol****12.2 Ecotoxicity**

May cause harm to aquatic organisms

12.3 Mobility

This substance is mobile in soil

12.4 Degradability

This solution is biodegradable

12.5 Bioaccumulation

This substance is soluble in water and has moderate to high volatility

12.6 Other adverse effects

Harmful by inhalation. May cause headache, nausea and drowsiness. May cause adverse effects to the central nervous system. Vapour may be irritant to the respiratory tract.

13.0 Disposal considerations**13.1 Waste treatment methods****Product**

Disposal together with normal waste is not allowed. Special disposal required to local regulations. Do not let product enter drains. Contact waste disposal services.

Contaminated Packaging

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

European Waste Catalogue Number

No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

14.0 Transport information**14.1 UN number**

2924

14.2**Hazard Class**

3

Subsidiary Hazard Class

8

Packing Group

II

14.3 Transport hazard class(es)**ADR-Class**

3

Subsidiary Hazard Class

8

(labels; Classification Code; Hazard Identification No; Tunnel restriction code)

II

RID-Class

3

Subsidiary Hazard Class

8

(labels; Classification Code; Hazard Identification No; Tunnel restriction code)

II

IMDG-Class

3

Subsidiary Hazard Class

8

(Labels; EmS)

II

14.4 Packing group

II

14.5 Environmental Hazards**Labelling according to 5.2.1.8 ADR**

No Data

Labelling according to 5.2.1.8 RID

No Data

Labelling according to 5.2.6.3 IMDG

No Data

Classification as environmentally hazardous

No Data

According to 2.9.3 IMDG

No Data

Classified as 'P' according to 2.10 IMDG

No Data

14.6 Special precautions for user**14.7 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code****IMDG**

Not applicable

15.0 Regulatory Information**15.1 Safety, health and environmental regulations/
Legislation for the substance or mixture**

Highly Flammable and Corrosive

16.0 Other information**Full text of R-Phrases referred to under section 2 and 3**

R11	Highly Flammable
R36	Irritating to eyes
R38	Irritating to skin
R48/20	Harmful danger or serious damage to health by prolonged exposure by inhalation
R63	Possible risk to the unborn child
R65	Harmful, may cause lung damage if swallowed
R67	Vapour may cause drowsiness and dizziness
R37	Irritating to respiratory system
R34	Causes Burns

Full text of H-Statements referred to under section 2 and 3

H314	Causes severe skin burns and eye damage
H335	MAY CAUSE RESPIRATORY IRRITATION
H319	CAUSES SERIOUS EYE IRRITATION
H315	CAUSES SKIN IRRITATION
H225	HIGHLY FLAMMABLE LIQUID AND VAPOR
H336	May Cause Drowsiness or dizziness

Full text of Safety Phrases

S7	Keep container tightly closed
S16	Keep away from sources of ignition- No smoking
S24/25	Avoid contact with skin and eyes
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37	Wear suitable protective clothing and gloves
S62	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label

Other information

This information is based upon Solumetrics Ltd Knowledge of this product at the time this Safety Data Sheet was prepared. It is given in good faith and no warranty is implied. The information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The user must satisfy him/her self as to the purpose this product is put to and the possible change in classification should this product be mixed or formulated with other compounds