

Material Safety Data Sheet

Section1. Product Information and Company Identification			
Product name	Hydrochloric acid 30-33%		
Mol.formula	HCl	CAS NO	7647-01-0
Mol.wt	36.46 g/mol		
Manufacture name	Pioneers for laboratory chemicals		
Brand name	Piochem		
Address	Area 540, Industrial Zone 6th October city Giza, Egypt.		
Website	www.piochem.com		
E-mail	info@piochem.com		
Phone number	+201225728304 , +201023932115		

SECTION 2: Hazards identification 2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008

Corrosive to metals (Category 1), H290

Skin corrosion (Category 1B), H314

Specific target organ toxicity - single exposure (Category 3), Respiratorysystem, H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram



Signal word

Danger

Hazard statement(s)

H290

May be corrosive to metals.

H314

Causes severe skin burns and eye damage.

H335

May cause respiratory irritation.

Precautionarystatement(s)

P260

Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P280

Wear protective gloves/ protective clothing/ eye protection/ face protection.

P303 + P361 + P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 + P310

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediatelycall a POISON CENTER/doctor.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard
Statements

none

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients 3.1 Mixtures

Formula : HCl
Molecular weight : 36.46 g/mol

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component		Classification	Concentration
Hydrochloric acid			
CAS-No.	7647-01-0	Met. Corr. 1; Skin Corr. 1B;	>= 30 - < 50 %
EC-No.	231-595-7	STOT SE 3; H290, H314,	
Index-No.	017-002-01-X	H335	
		Concentration limits:	
		>= 25 %: Skin Corr. 1B,	
		H314; 10 - < 25 %: Skin Irrit.	
		2, H315; 10 - < 25 %: Eye Irrit.	
		2, H319; >= 10 %: STOT SE	
		3, H335; >= 0.1 %: Met. Corr.	
		1, H290;	

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures 4.1 Description of first aid measures General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

SECTION 6:

Accidental release measures 6.1

Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Evacuate personnel to safe areas.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

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

For disposal see section 13.

SECTION 7: Handling and storage 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Metal containers must be lined. Corrodes metal Handle and open container with care.

Storage class (TRGS 510): Non-combustible,corrosive hazardous materials

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection 8.1 Control parameters 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

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

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 (US) or type ABEK (EN 14387) respirator cartridges as a backup to enginee 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).

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties 9.1 Information on basic physical and chemical properties

- | | |
|---|--|
| a) Appearance | Form: liquid |
| b) Odour | pungent |
| c) Odour Threshold | No data available |
| d) pH | < 1 at 20 °C |
| e) Melting point/freezing point | No data available |
| f) Initial boiling point and boiling range | 110 °C at 1013 hPa |
| g) Flash point | Not applicable |
| h) Evaporation rate | No data available |
| i) Flammability(solid, gas) | No data available |
| j) Upper/lower flammability or explosive limits | No data available |
| k) Vapour pressure | No data available |
| l) Vapour density | No data available |
| m) Relative density | 1.16 g/cm ³ at 20 °C |
| n) Water solubility | No data available |
| o) Partition coefficient: octanol/water | No data available |
| p) Auto-ignition | No data available temperature |
| q) Decomposition | No data available temperature |
| r) Viscosity | No data available |
| s) Explosive properties | No data available |
| t) Oxidizing properties | The substance or mixture is not classified as oxidizing. |

9.2 Other safety information No data available **SECTION 10:**

Stability and reactivity

10.1 Reactivity No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions No

data available **10.4 Conditions to**

avoid No data available **10.5**

Incompatible materials No data

available **10.6 Hazardous**

decomposition products

Other decomposition products - No data available

In the event of fire: see section 5

SECTION 11: Toxicological information 11.1 Information on toxicological effects Acute toxicity

No data available Hydrochloric acid

Inhalation: Inhalation may provoke the following symptoms: Respiratory irritation Cough Difficulty in breathing Pneumonia (Hydrochloric acid)

Skin corrosion/irritation

Skin - Rabbit

Result: Causes burns.

Remarks: Aqueous solution causes burns of eyes, skin and mucous membranes.

Skin - Rabbit (Hydrochloric acid) Result: Causes burns.

Serious eye damage/eye irritation

Eyes - Rabbit (Hydrochloric acid)

Result: Corrosive to eyes

Respiratory or skin sensitisation

No human information is available.

Did not cause sensitisation on laboratory animals. (Hydrochloric acid)

Germ cell mutagenicity

No data available (Hydrochloric acid)

Carcinogenicity

This product is or contains a component that is not classifiable as to its classification. (Hydrochloric acid) (Hydrochloric acid)

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available (Hydrochloric acid)

Specific target organ toxicity - single exposure

The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation. (Hydrochloric acid) **Specific target organ toxicity - repeated exposure**

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

No aspiration toxicity classification (Hydrochloric acid)

Additional Information

RTECS: Not available

Inhalation of vapors may cause: burning sensation, Cough, wheezing, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema (Hydrochloric acid)

SECTION 12: Ecological information 12.1 Toxicity

Toxicity to fish LC50 - *Lepomis macrochirus* (Bluegill) - 24.6 mg/l - 96 h (Hydrochloric acid) Toxicity to daphnia and EC50 - *Daphnia magna* (Water flea) - 4.91 mg/l - 48 h (Hydrochloric acid) other aquatic invertebrates

12.2 Persistence and degradability

The methods for determining biodegradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available (Hydrochloric acid)

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

May be harmful to aquatic organisms due to the shift of the pH. Do not empty into drains.

SECTION 13: Disposal considerations 13.1 Waste treatment methods Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information 14.1 UN number

ADR/RID: 1789

IMDG: 1789

IATA: 1789

14.2 UN proper shipping name

ADR/RID: HYDROCHLORIC ACID

IMDG: HYDROCHLORIC ACID

IATA: HYDROCHLORIC ACID

14.3 Transport hazard class(es)

ADR/RID: 8

IMDG: 8

IATA: 8

14.4 Packaging group

ADR/RID: II

IMDG: II

IATA: II

14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.6 Special precautions for user

No data available

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislations specific for the substance or mixture**

This safety data sheet 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