Material Safety Data Sheet

Version: 02

Revision Date : 4-8-2025

Section 1. 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		
manufacturer 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	0 12 05700001		

SECTION 2: Hazards identification

2.1Classification 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/mixturecontains 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. EC-No. Index-No.	7647-01-0 231-595-7 017-002-01-X	Met. Corr. 1; Skin Corr. 1B; STOT SE 3; H290, H314, 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;	>= 30 - < 50 %

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/personalprotection 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 flammabilityor explosive limits	No data available
k)	Vapour pressure	No data available
l)	Vapour density	No data available
m)	Relative density	1.16 g/cm3 at 20 °C
n)	Water solubility	No data available
o)	Partition coefficient: noctanol/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 availableHydrochloricacid

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

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.(Hydrochloricacid)

Germ cell mutagenicity

No data available(Hydrochloricacid)

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(Hydrochloricacid)

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.(Hydrochloricacid) **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(Hydrochloricacid)

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 biodegradabilityare not applicable to inorganic substances.

12.3 Bioaccumulativepotential
No data available **12.4**
Mobility in soil
No data available(Hydrochloricacid)

12.5 Results of PBT and vPvB assessment
This substance/mixturecontains 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/legislationspecific for the substance or mixture This safetydatasheet 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