

Safety Data Sheet

Hydrochloric Acid

28% & 32%

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1 IDENTIFICATION OF CHEMICAL

Product Name: Hydrochloric Acid 28%
Hydrochloric Acid 32%

2 COMPOSITION

Ingredients	Cas No.	Einecs No.	Phrases
Hydrochloric Acid 32%		231-595-7	R 34-37

3 HAZARD IDENTIFICATION

Causes burns. Irritating to respiratory system, high atmospheric concentrations may lead to pulmonary oedema.

4 FIRST AID

Skin Contact: Drench the skin with plenty of water. Remove contaminated clothing and wash before reuse. If large areas of the skin is damaged or if irritation persists seek medical attention.

Eye Contact: Irrigate thoroughly with water for at least 10 minutes. Obtain medical attention.

Ingestion: Wash out mouth with water. Do not induce vomiting. If patient is conscious, give water to drink. Seek immediate medical attention.

Inhalation: Remove from exposure, rest and keep warm. In severe cases, or if recovery is not rapid, or complete. Seek immediate medical attention.

5 FIRE-FIGHTING MEASURES

Suitable Extinguishers: Use extinguisher suitable to cause of fire.

Hazardous combustion Products: Hydrogen Chloride

Special Equipment for fire fighting: Self contained breathing & apparatus and full protective clothing.

6 ACCIDENTAL RELEASE MEASURES

Safety Precautions: Wear appropriate PPE - See Section 8

Environmental Precautions: Do not allow undiluted material to enter drains, sewers or water courses.

Clean up Procedure: Bund spill area, dilute with plenty of water and neutralise with lime slurry or sodium carbonate. Flush away with plenty of water.

Note Authorisation to discharge trade effluent must be obtained from local water company.

7 HANDLING AND STORAGE

Handling:	Ventilation: Good general ventilation. Local exhaust ventilation be required. Recommended procedure & equipment. Avoid contact with skin and eyes. Do not breathe fumes.
Storage:	Temperature range: Ambient.
Suitable Storage Media:	Rubber lined mild steel, PVC, high density polyethylene.

8 EXPOSURE CONTROL/PERSONAL PROTECTION

Occupational Exposure Limits	5 ppm (7mg/m ³), Short term exposure limit, Type: OES
PPE:	
Respiratory:	Type approved RPE for acidic vapours.
Hand:	PVC or rubber gloves
Eye:	Safety goggles.
Skin:	Rubber boots, PVC overalls.
Hygiene Measures:	Always wash thoroughly after handling chemicals.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colourless to pale Yellow fuming liquid.
Odour:	Pungent
pH:	Less than 1.
Boiling Point/range:	Decompose to form a constant boiling solution 20.2% @ 110°C
Melting Point/range:	<-29°C
Flammability:	Not combustible
Relative density:	>1.125 @ 15.5°C
Solubility in water:	Completely miscible
Solubility in fat:	Soluble in alcohol's and aldehydes

10 STABILITY AND REACTIVITY

Known Hazardous reactions:	Attacks most common metals liberating hydrogen, which can form explosive mixtures with air. Can react violently with oxidising agents liberating chlorine.
Materials to avoid:	Alkalis, concentrated sulphuric acid, oxidising agents, ammonia, amines.
Hazardous decomposition products:	Hydrogen chloride.

11 TOXICOLOGICAL INFORMATION

Inhalation of mists and vapour will cause irritation of the upper respiratory tract, high concentrations may cause corrosion, pulmonary oedema may occur up to 48 hours after exposure. Irritating to skin, eyes and mucous membranes. Ingestion may cause damage to the gastrointestinal tract.
Repeated exposure to low levels may cause erosion of the teeth and ulceration of the nasal septum and gums.

12 ECOLOGICAL INFORMATION

Mobility:	Volatile liquid, soluble in water, predicted to have high mobility in soil.
Degradability:	Neutralised slowly by natural alkalinity.
Bioaccumulative potential:	Material does not bioaccumulate.
Aquatic Toxicity:	Fatal to fish and other aquatic life due to low pH.

13 DISPOSAL CONSIDERATIONS

Substance Via an authorised waste disposal contractor to an approved waste disposal site, observing all local and national regulations.

Container As substance

14 TRANSPORT INFORMATION

UN No 1789
Primary Hazard Corrosive
Packing Group II
Hazard ID No 8
ADR/RID Item No 5⁰(b)
Hazchem 2R

15 REGULATORY INFORMATION

Label Name Hydrochloric Acid 28% & 32%
Symbols Corrosive

Risk Phases R34/R37 Causes burns. Irritating to the respiratory system.

Safety Phrases S1/2 Keep locked up and out of reach of children.
S26 In case of contact with eyes, rinse immediately with plenty of water.
S45 In case of accident or if you feel unwell, seek medical advice immediately.

16 OTHER INFORMATION

Recommended uses and restrictions: No further information.

Further information sources: No further information.

Sources of key data used to compile Safety Data Sheet.

Approved supply list. Approved carriage list, EH40, ACIGH tables.

The data in this Safety Data Sheet has been supplied as required by the Chemicals (Hazard Identification and Packaging) Regulations 1997, as amended, for the purpose of protecting the health and safety of industrial users who are deemed capable of understanding and acting on the information provided. Please ensure that it is passed to the appropriate person(s) in your company, who are capable of acting on the information.

This data sheet does not constitute a users assessment of the workplace risk as required by the Health and Safety at Work Act, COSHH, Management of Health and Safety at Work or other health and safety legislation.