

SAFETY DATA SHEET

HYDROCHLORIC ACID 36% W/W

1. IDENTIFICATION OF CHEMICAL

Chemical name: HYDROCHLORIC ACID 36% W/W
Synonyms: MURIATIC ACID. SPIRITS OF SALT.
CAS number: 7647-01-0
EINECS number: 231-595-7

2. COMPOSITION

Composition: 36% w/w hydrochloric acid.

3. HAZARD IDENTIFICATION

Main hazards: Causes burns. Reacts violently with water. Irritating to the respiratory system.

4. FIRST-AID MEASURES

Skin contact: In case of skin contact, flood the splashed area with large quantities of running water.

Eye contact: If the substance has entered the eyes, wash out with water or saline solution for at least 15 minutes.

Ingestion: If the chemical has been confined to the mouth, give large quantities of water as a mouth wash. Ensure the mouth wash is not swallowed. If the chemical has been swallowed, give about 250ml water to dilute it in the stomach. In severe cases seek medical attention.

Inhalation: Remove the casualty out of the danger area after first ensuring your own safety. Loosen the patient's clothing. If the casualty is unconscious, place in the recovery position and monitor breathing. Apply artificial respiration only if patient is not breathing. Seek medical attention when anyone has symptoms apparently due to swallowing or inhalation.

5. FIRE-FIGHTING MEASURES

Exposure hazards: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Material is not combustible. If involved in a fire it decomposes to emit toxic fumes of hydrogen chloride gas.

Suitable extinguisher: Use waterspray to cool fire-exposed containers. Use extinguishing media appropriate to the surrounding fire conditions.

6. ACCIDENTAL RELEASE MEASURES

Personal protection: Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves.

Cont.....

Leaks & spills: Sweep up spilled substance but avoid making dust. Transfer to a closable salvage container for disposal by an appropriate method or retain for recovery.
Clean-up procedures: Wash the spillage site with large amounts of water.

7. HANDLING AND STORAGE

Handling requirements: Keep containers tightly closed. Store in a cool dry area. This material reacts violently with water. May develop pressure.
Storage precautions: Wear a respirator in non-ventilated areas and chemical safety goggles. Avoid prolonged contact or inhalation.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protection: Wear appropriate protective clothing.
Exposure limits: 5 ppm (7 mg/m³) – 8 h TWA: 5 ppm (7 mg/m³) – 15 min.
Type: ORL-RBT LD50
Toxicity: 900 mg/kg

9. PHYSICAL AND CHEMICALS PROPERTIES

Chemical formula: HCl
Appearance and odour: Clear colourless liquid.
Vapour pressure: 190 mm 25°C
Relative density: 1.3

10. STABILITY AND REACTIVITY

Avoid contact with: Water, bases, amines, alkali metals, copper, copper alloys and aluminium.

11. TOXICOLOGY INFORMATION

Health effect: Skin: The liquid is extremely destructive to skin tissue. In contact with skin this substance causes severe burns accompanied by blistering and peeling.
Eyes: The liquid is extremely destructive to eyes. In severe cases it will cause corneal burns which may result in impairment or loss of sight.
Inhalation: Material is extremely destructive to tissues of the mucous membranes and upper respiratory tract. Inhalation may be fatal as a result of spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting.
Ingestion: Harmful if swallowed. If swallowed there is immediate severe irritation and damage. Symptoms include headache, nausea and vomiting.

12. ECOLOGICAL EFFECTS

Ecotoxicity: Data not available
Persistence: Data not available
Appraisal: Data not available

13. DISPOSAL CONSIDERATIONS

Waste disposal: For small quantities: cautiously add to a large stirred excess of water. Adjust pH to neutral, separate any insoluble solids or liquids and package them for hazardous waste disposal. Flush the aqueous solution down the drain with

Cont.....

Plenty of water. The hydrolysis and neutralisation reactions may generate heat and fumes which can be controlled by the rate of addition. Observe all local and environmental regulations.

14. TRANSPORT INFORMATION

IMDG code

UN no: 1789
Packaging group: II
Class: 8

ADR/RID

Subst. ID no: 1789
Class + Item no: 8, 5(b)

IATA/ICAO

UN no: 1789

15. REGULATORY INFORMATION

Classification: Corrosive

Risk phrases: R34: Causes burns
R14: Reacts violently with water
R37: 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 and seek medical advice.

16. ADDITIONAL INFORMATION

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Chemical Treatment Services Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.