



DCM Shriram Ltd.  
[Unit: SHRIRAM ALKALI & CHEMICALS]

## MATERIAL SAFETY DATA SHEET

### HYDROCHLORIC ACID

#### SECTION 1: CHEMICAL PRODUCT AND COMPANY INFORMATION

Supplier	: DCM Shriram Ltd. Unit : Shriram Alkali & Chemicals 749/GIDC, Jhagadia-393110, Dist- Bharuch, Gujarat. Phone No: (02645)222000/222015
Substance	: Hydrochloric Acid
Trade Name/Synonyms	: Hydro Chloride, Hydrogen Chloride
CAS number	: 7647-01-0
Application	: Use in manufacture of Chlorinated Organic Chemicals, Dyes, Intermediates, Leather tanning, Ore refining, Rubber Industry, etc.

#### SECTION 2: HAZARDS IDENTIFICATION

##### HAZARD PICTOGRAM:



##### • NFPA RATINGS:

HEALTH	: 3
FLAMMABILITY	: 0
REACTIVITY	: 0
SPECIAL	: Not Specified

- As per National regulations material is a Hazardous chemical

Symbol: C Corrosive  
T Toxic

**R-phrases:** Toxic by inhalation. Causes severe burns.

**S-phrases:** Keep container in a well ventilated place. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable



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protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

### SECTION 3: COMPOSITION INFORMATION ON INGREDIENTS

Chemical Name : HYDROGEN CHLORIDE (HYDROCHLORIC ACID) and water  
 CAS : 7647-01-0 and 7732-18-5

### SECTION 4: FIRST AID MEASURES

**INHALE:** Move the victim to fresh air immediately, if breathing stopped give respiration; obtain medical attention immediately.

**SKIN:** Remove contaminated clothing & Shoes immediate. Wash With soap/mild detergent & large amounts of water for 15 min. if chemical burn cover area with sterile dry dressing & bandage; not too tightly.

**EYE:** Wash immediately with large amounts of water lifting upper & lower eye lids at least 15 min.

### SECTION 5: FIRE FIGHTING MEASURES

**Extinguishing Media** :Dry chemical, carbon dioxide, halon, water spray or standard foam. for larger fires use water spray, fog or standard foam.

**Fire Fighting Procedures** :Move away from fire area if possible. Cool it and controls exposed flames with water from side until fire extinguished. stay away from storage tank ends.

**Unusual Fire/Explosion Hazard** :Use flooding amounts of water as fog. Cool and control with flooding amounts of water, apply from as far a distance as possible. avoid breathing corrosive vapors, keep upwind.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

**Spill Release Procedures:** Contain the spills. Small Acid spillage should be neutralised by using Soda Ash & or lime & Flushed with large quantity of water. Ample ventilation should be provided at the place.

**Neutralizing Agent:** Slaked lime, sodium bicarbonate or crushed limestone.

### SECTION 7: HANDLING AND STORAGE

**Handling and Storage Precautions:** Store in cool, clean & well-ventilated area. Keep away from direct sun light. Always use personal protection equipments like, Rubber hand gloves, Full body PVC suit, Face shield/Goggles.

**Other Precautions:** For large spills: like far ahead of spill for later disposal. keep unnecessary people away. isolate hazard area and deny entry. To avoid violent reaction, ALWAYS add material to water and NEVER water to material.

### SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION



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- Respiratory Protection:** Immediate danger to health or life conditions: Self Contained breathing apparatus with full face piece operated in positive pressure mode.
- Ventilation :** Provide local exhaust or process enclosure ventilation to meet published exposure limits.
- Protective Gloves :** Acid resistant gloves
- Eye Protection :** Chemical work goggles/face shield optional.
- Other Protective Equipment:** Clothing (i.e. Rubber apron)
- Work Hygienic Practices :** Provide eye wash fountain & quick drench shower within the immediate work area for emergency use.  
 supplemental safety and health not applicable.

#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Colorless or slightly yellow fuming liquid with pungent odor.

Boiling Pt : 384° F, 196° C

Vapor Density : 1.3

Spec Gravity : 1.2

pH : 1.1

Solubility in Water : SOLUBLE

LEL : Not applicable

UEL : Not applicable

Flash Point : Not applicable

#### SECTION 10: STABILITY AND REACTIVITY

**Stability Indicator/Materials to Avoid :** Avoid contact with common metals it produces hydrogen which may form explosive mixtures with air.

**Stability Condition to Avoid:** Reactive with most metals and their alloys, Bases Alkali, Unsaturated organic products, Reducing Agents, Carbides, Explosives, etc.

**Hazardous Decomposition Products:** Thermal decomposition may release hydrogen and Chlorine

#### SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity

**LD50 Oral (Rabbit):** 900 mg/kg.

OSHA PEL : 5 PPM

ACGIH TLV : 5 PPM

Further toxicological information

**After inhalation:** Toxic, coughing, Inhalation may lead to the severe Irritation of the upper respiratory tract.

**After skin contact :** Burns, risk of corneal clouding

**After swallowing :** Burns in esophagus and stomach

**After uptake of large quantities:** Cyanosis, Cardiovascular failure, Respiratory arrest



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## SECTION 12: ECOLOGICAL INFORMATION

No special data

Further ecological data with water formation of hydrochloric acid

The following applies to HCl in general : Harmful effect on aquatic organism Harmful effect due to pH shift

**Biological effect** : Hydrochloric acid (Including such due to reaction) : lethal for fish as from 25mg/l

**LC50** : 862 mg/l (1 N solution) Harmful effect begin at : plants 6 mg/l does not cause biological oxygen deficit

Do not allow enter in waters, waste water, or soil

## SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Methods: Dispose as per Land/Air/Water state and local regulations.

## SECTION 14: TRANSPORT INFORMATION

NAME : HYDROCHLORIC ACID

UN NUMBER : 1789

HAZCHEM CODE : 2R

TRANSPORT HAZARD : Class 8

SHIPPING LABEL(s): CORROSIVE

## SECTION 15: REGULATORY INFORMATION

- Refer Section-2
- As per National and state regulations.

## SECTION 16: OTHER INFORMATION

Name of the firm	Address	Contact Person in Emergency	Telephone no.
Shriram Alkali & Chemicals (SAC)	749, GIDC Estate Jhagadia. Pin-393110 Dist: Bharuch	Head of Production	Telephone NOS : 02645-222000/222015

**Chlor- Alkali emergency response network toll free No. : 1800-11-1735**

**Disclaimer:**

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