


## **SECTION 1: Chemical Product and Company Information**

**Product Name:** SupraPure Hydrochloric Acid 32%  
**Pure Substance/Mixture:** Mixture  
**Recommended Use:** Laboratory use Only  
**Company Identification:** Atomika  
70 Chattan Road  
Glenferness  
South Africa  
2191  
Cell: +2782 354 7730  
e-mail: Atomika.lab@outlook.com

## **SECTION 2: Composition, Information on Ingredients**

<b>CAS #:</b>	<b>Chemical Name:</b>	<b>EINECS #:</b>	<b>Hazard Symbol:</b>
7647-01-0	Hydrochloric Acid	231-595-7	

## **SECTION 3: Hazard Identification**

### **EMERGENCY OVERVIEW**

*Harmful in contact with skin and if swallowed. Causes burns.*

#### **Potential Health Effects**

**Eye:** Causes severe eye burns. May cause eye damage.  
**Skin:** Causes severe skin burns.  
**Ingestion:** Causes gastrointestinal tract burns. May cause perforation of the digestive tract.  
**Inhalation:** May cause severe irritation of the respiratory tract with sore throat and coughing.  
**Other:** Corrosive to metals

## **SECTION 4: First Aid Measures**

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Immediate medical attention is required.

**Skin:** Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Immediate medical attention is required.

**Ingestion:** **DO NOT** induce vomiting. Call a physician or poison control centre immediately.

**Inhalation:** Remove to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Remove from exposure, lie down. Immediate medical attention is required.

**Most important symptoms and effects:** Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or oesophagus should be investigated. Ingestion causes sever swelling, severe damage to the delicate tissue and danger of perforation.

## **SECTION 5: Fire Fighting Measures**

**General Information:** Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus to prevent contact with thermal decomposition products.

**Extinguishing Media:** Substance in non-flammable, use agent most appropriate to extinguish surrounding fire.

**Specific Hazards from Chemical:** Corrosive material. Causes burns by all exposure routes. Thermal decomposition can lead to release of irritating gasses and vapours

## **SECTION 6: Accidental Release Measures**

**Personal Precautions:** Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Use personal protective equipment as required. Do not get in eyes, on skin, or on clothing.

**Environmental Precautions:** Should not release into the environment. Do not flush into surface water or sanitary sewer system.

**Spills / Leaks:** Soak up with inert absorbent material. Sweep up and shovel into suitable containers and for disposal.

## **SECTION 7: Handling and Storage**

**Handling:** Wear personal protective equipment / face protection. Do not breathe mist/vapours/spray. Do not get into eyes, on skin, or on clothing. Do not ingest. If swallowed, then seek immediate medical assistance.

**Storage:** Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosive area. Incompatible materials: Strong oxidizing agents, bases, sodium hypochlorite, Amines, Fluorine, Cyanides and alkaline materials.

## **SECTION 8: Exposure Controls, Personal Protection**

**Engineering Controls:** Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

**CAS #: 7647-01-0 (Hydrochloric Acid)**

ACGIH TLV	Ceiling: 2 ppm	
OSHA PEL	Ceiling: 5 ppm	(Vacated) Ceiling: 5 ppm
	Ceiling: 7 mg/m <sup>3</sup>	(Vacated) Ceiling: 7 mg/m <sup>3</sup>
NIOSH IDLH	IDLH: 50 ppm	
	Ceiling: 5 ppm	Ceiling: 7 mg/m <sup>3</sup>
Mexico OEL (TWA)	Ceiling: 2 ppm	

### Legend

ACGIH – American Conference of Governmental Industrial Hygienists

OSHA – Occupational Safety and Health Administration

NIOSH IDLH: NIOSH – National Institute of Occupational Safety and Health

### **Personal Protective Equipment (PPE)**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles. Tight sealing safety goggles. Face protection shield.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in European Standard EN 149. Use an approved respirator if exposure is exceeded or if irritation or other symptoms are experienced.

## **SECTION 9: Physical and Chemical Properties**

<b>Physical State:</b>	Liquid
<b>Colour:</b>	Clear colourless
<b>Odour:</b>	Pungent
<b>pH:</b>	< 1.0
<b>Vapour Pressure:</b>	125 mbar @ 20°C
<b>Viscosity:</b>	1.8 mPa.s @ 15°C
<b>Boiling Point:</b>	57°C @ 760 mmHg

**Freezing/Melting Point:** -35°C  
**Autoignition Temperature:** No information available  
**Flash Point:** No information available  
**Lower Explosion Limits:** Not available  
**Upper Explosion Limits:** Not available  
**Decomposition Temperature:** Not available  
**Solubility in Water:** Soluble in water  
**Specific Gravity/Density:** 1.18  
**Molecular Formula:** HCL  
**Molecular Weight:** 36.46

### SECTION 10: Stability and Reactivity

**Reactive Hazard:** None known based on information available.  
**Chemical Stability:** Stable under normal conditions.  
**Conditions to Avoid:** Incompatible products. Excess heat.  
**Incompatibilities with Other Materials:** Metals, Strong oxidising agents, Bases, Sodium Hypochlorite, Amines, Fluorine, Cyanides, Alkaline compounds.  
**Hazardous Decomposition Products:** Hydrogen chloride gas.  
**Hazardous Polymerization:** Hazardous polymerization does not occur.  
**Hazardous Reactions:** Contact with metals may evolve flammable hydrogen gas.

### SECTION 11: Toxicological Information

**LD50/LC50:** RTECS:  
**CAS #: 7647-01-0 (Hydrochloric Acid)**  
 Oral: LD50 = 238 – 227 mg/kg (Rat)  
 Dermal: LD50 = >5010 mg/kg (Rabbit)  
 Inhalation: LC50 = 1.68 mg/l (Rat – 1h)  
**Other:** Causes severe burns by all exposure routes.

### SECTION 12: Ecological Information

**Ecotoxicity:** Do not empty into drains. Large amounts will affect pH and harm aquatic organisms.  
**Persistence and degradability:** Persistence is unlikely based on information available.  
**Bioaccumulation:** No information available.  
**Mobility:** Will likely be mobile in the environment due to its water solubility.

Chemical Name	Algae/aquatic Plants	Fish	Microtox	Crustacea
Hydrochloric Acid 7647-01-0	-	LC50: 282 mg/l (96h, <i>Gambusia affinis</i> ) LC50: mg/l ( <i>Leuciscus idus</i> )	-	EC50: 56 mg/l (72h, <i>Daphnia</i> )

### SECTION 13: Disposal Considerations

**Waste Disposal Methods:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

### SECTION 14: Transport Information

	DOT	ADR/RID	IMDG	ICAO-TI and IATA-DGR
<b>Shipping Name:</b>	Corrosive liquid, acidic, inorganic, n.o.s., hydrochloric acid	Corrosive liquid, acidic, inorganic, n.o.s., hydrochloric acid	Corrosive liquid, acidic, inorganic, n.o.s., hydrochloric acid	Corrosive liquid, acidic, inorganic, n.o.s., hydrochloric acid
<b>Hazard Class:</b>	8	8	8	8

<b>UN Number:</b>	1789	1789	1789	1789
<b>Packing Group:</b>	II	II	II	II

## **SECTION 15: Regulatory Information**

### **European / International Regulations**

**Hazard Symbol:** C – Oxidizing  
E - Corrosive

**Risk Phrases:** R35 – Causes burns.  
R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.  
R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed.  
R36 – Irritating to eyes.

**Safety Phrases:** R41 – Risk of serious damage to eyes.  
S10 - When using do not eat or drink.  
S23 - Do not inhale gas/fumes/vapour/spray.  
S24/25 - Avoid contact with skin and eyes.  
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S27/28 - After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.  
S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.  
S3/7/9 - Keep container tightly closed in a cool, well-ventilated place.  
S45 - In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)  
S61 - Avoid release to the environment. Refer to special instructions/safety data sheet.

## **SECTION 16: Other Information**

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability of any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information to their particular purposes. In no event shall the company be liable for any claims, losses or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.*

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