

# HYDROCHLORIC ACID PHARMACEUTICAL USE

32%

Last revision 2008

**Chemical Name:** Molecular formula: HCl  
 NO.CAS: 7647-01-0  
 Abbreviation: -

## General Description:

Hydrochloric acid is a solution of hydrogen chloride in water. Hydrochloric acid is a colorless to soft yellowish, with sharp odor and harsh taste. The product can be mixed in any proportion with water, acetic acid, ethyl alcohol, chloroform, acetone, etc.

Hydrochloric acid is a strong acid and also a very stable compound. At heat (over 1500°C) it decomposes in hydrogen and chlorine.

## Technical Quality Conditions:

Characteristics	MU	Values	Test methods
Identification:			
-strong acid	-	comply	PhE V:2005 pt.2.2.4
- reaction for chlorides	-	comply	PhE V:2005 pt.2.3.1.
Appearance :			
-clear liquid	-	comply	PhE V:2005 pt.2.2.1
- colourless	-	comply	PhE V:2005 pt.2.2.2 Method II
Free chlorine (Cl <sub>2</sub> ), max.	ppm	4	PhE V:2005:0002
Sulphates ( SO <sub>4</sub> ), max.	ppm	20	PhE V:2005 pt.2.4.13
Heavy metals ( Pb ), max..	ppm	2	PhE V:2005 pt.2.4.8
Evaporation residues, max.	%	0.01	PhE V:2005:0002
HCl , min	%	32	PhE V:2005:0002

## Specific Properties:

pH	0.1 (solution 4%)
Boiling point	-84°C
Ignition temperature	not ignitable

*The values of those characteristics are approximated, and are only for general information and are not part of the technical quality conditions.*



## Main Applications:

- chemical and pharmaceutical industry;
- synthetic fibers industry;
- leather industry;
- metallurgical industry as pickling and cleaning agent.

## Shipping Information:

- rubber-coated railroad tank cars and tank trucks.  
The tank capacity should be adequate to carry a sufficiently large stock and be able to receive the total amount of volume from the road tanker.

## Storage:

Hydrochloric acid must be stored and disposed of in compliance with relevant regulations. The product is packing in sealed glass containers or other inert material.

Hydrochloric acid should be stored in a cool, dry, well-ventilated area in tightly sealed containers protected from exposure to weather, extreme temperature changes, and physical damage. Also, the product should be stored in tanks from inert material, at a temperature below 30°C. Product should not exceed 100 degrees F at delivery or during storage.

Hydrochloric acid is considered as a strong oxidizer and steps should be taken to separate hydrochloric acid and hydrochloric acid products from incompatible materials such as copper, brass, bronze, galvanized steel, tin, zinc, oxidizers, combustible materials, plastics, rubber.

## Safety Considerations:

Please refer to the product Material Safety Data Sheet (MSDS) offering customers help to better satisfy their particular handling, safety and disposal needs and those that may be required by locally applicable health and safety regulations.

## Warning:

Hydrochloric acid is highly corrosive hazardous product. In contact with some metals, hydrochloric acid releases hydrogen (fire danger!).

Avoid body contact. It is dangerous to eyes and skin. Destroys skin tissues and causes severe chemical burns.

Inhalation of vapors can cause serious injury to respiratory tract. Ingestion can injure the digestive system.

## Attention:

Information contained in this document is provided to the best of our knowledge and experience.

Please contact OLTCHIM to see if the document has been revised.

## Important:

For a better suitability of the product for your particular purpose, tests are recommended prior product use. You are advised to make your own determination as to safety, appropriate manner of handling, storage, use and disposal. All the information contained in this product technical sheet is offered for your consideration, investigation and verification. The data is presented in good faith and is believed to be reliable. You should not consider the descriptions, information, data or design as a part of our terms and conditions of sale. We expressly disclaim responsibility or liability for any loss, damage or expense arising out of reliance on the information provided herein.