



HYDROCHLORIC ACID - Solution (HCl)

PRODUCT SPECIFICATIONS:

Purity (HCl)	: min. %30 (m/m)
Residue after ignition	: max. 10 ppm
Sulfate (as H ₂ SO ₄)	: max. 0,5 ppm
Chlorine and Bromine (as Cl ₂)	: max. 10 ppm
Sulfite (as H ₂ SO ₃)	: max. 0,5 ppm
Iron (Fe) content	: max. 0,2 ppm
Appearance	: Pure
Color	: Colorless – light yellow
Density (15 °C)	: 1.152 gr/cm ³
Molecular weight	: 36.46 g/g-mol.

ANALYTICAL METHOD

Titrimetric
Gravimetric
Turbidimetric
Titrimetric
Colormetric
Colormetric
Visual
Visual

Appearance: A colorless-pale yellow clear solution with irritating characteristic sharp odor.

PHYSICAL AND CHEMICAL PROPERTIES:

- Reacting with many of the metals, releases hydrogen which explodes when in contact with air igniter.
- Reacting with oxidizing materials, it releases a poisonous gas chlorine.
- Reacts strongly with alkalis and releases heat.
- Materials not to be contacted: Known metals, water, amines, metal oxides, acetic anhydrate, propiolactane, vinyl acetate, mercury sulfate, calcium phosphite, formaldehyde, alkalis, carbonates, strong alkalis, sulphur acid, chloro sulphonic acid.

PACKAGING:

- Delivered in inner PVC, outer polyester coated tankers, rubber inner coated HCL resistant steel tankers and polyethylene tankers as bulk.
- Not combustible, however. Due to its acidic characteristic, acid-resistant personal protective clothes and protective glasses should be worn and contact with skin and eyes should be avoided. Hydrochloric acid is corrosive against many of the metals.

STORAGE:

- Tanks manufactured from rubber coated carbon steel or plastic materials such as FRP and PVC may be used for storage of Hydrochloric Acid.
- Storage tanks should be kept away from direct sunlight and sources of heat and should be properly ventilated.
- Hydrochloric acid should not be stored near or together with oxidizing substances particularly nitric acid and chlorate.
- A pool should be made from acid proof material preventing the acid from spreading in case of spillage or leakage, with substances to neutralize the acid (limestone or sodium carbonate).

APPLICATION FIELDS:

It is one of the basic raw materials of the Chemical Industry with a wide range of applications. Some general examples are as follows:

- Water treatment
- Metal Industry
- Petrol Industry
- Paint Industry
- Textile Industry
- Pharmaceutical Industry
- Chemical Industry



SECURITY PRECAUTIONS:

Use glasses, face mask, gloves and protective clothing when transporting and working with hydrochloric acid. Keep a mask ready to use in case of acid vapour.

In case of contact with skin or eye, wash with plenty of water for 30 minutes. Seek for medical advise.

If the acid vapour is inhaled, take the patient to open air, keep him warm and make him rest. If inspiration is weak, give oxygen. If inspiration has stopped, make artificial respiration and immediately seek for medical care.

In case of swallowing acid, do not ignite, force to drink plenty of water.

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