

HYDROCHLORIC ACID (HCl)

PRODUCT SPECIFICATIONS

Parameters	Results	Analysis Methode
Concentration (HCl)	% 30-32 (m/m)	Titrimetric
Free Chlorine	max. 10 ppm (m/v)	Titrimetric
Iron (Fe)	max.0,2 ppm	Colorimetric
Insoluble materials	Absent	Physical control
Appearance	Colorless - Clear	Physical control
Density (20°C)	1,15-1,16 g/cm ³	Hydrometer

HEAVY METAL ANALYSIS	Results (max) ppm	Analysis Method
Pb	0,0008	ICP
Hg	0,00006	ICP
Fe	0,0006	ICP
Ni	0,001	ICP
Sr	ABSENT	ICP
Al	ABSENT	ICP
Mn	ABSENT	ICP
Ba	ABSENT	ICP
Cu	ABSENT	ICP
Li	ABSENT	ICP
Co	ABSENT	ICP

PHYSICAL AND CHEMICAL PROPERTIES

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

-Reacting with oxidizing materials, it releases a poisonous gas chlorine

-Reacting with many of the metals, releases hydrogen which explodes when in contact with air igniter.

-Reacts strongly with alkalis and releases heat.

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).

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 ignitate, force to drink plenty of water.

APPLICATION FIELDS

Water treatment
Paint Industry
Chemical Industry
Iron pickling
Petrol Industry
Textile Industry
In the regeneration of ion exchange resins