

ACIDUM MURIATICUM

(Ac. mur.)

Chemical symbol : HCl

Mol. wt.: 36.461

Common names : Acidum hydrochloricum, Acid muriatic, Hydrochloric acid; *French:* Acide chlorhydrique, s. muriatique; *German:* Chlorwasserstoffsäure.

Description : A colourless fuming liquid, odour pungent and a very acid taste. Its fumes and odour disappears when it is diluted with 2 volumes of *water*. It is soluble in water and alcohol, producing strong acid solutions. When distilled, it yields a constant boiling mixture containing approximately 20.2 percent w/w of hydrogen chloride. Boiling at about 110° and has a specific gravity of 1.16. It is commonly prepared by the interaction of sodium chloride and sulphuric acid or by combining chlorine and hydrogen. Contains not less than 35.0 percent w/w and not more than 38.0 percent w/w of HCl.

Identification : (i) when neutralised, it responds to all the *reactions* characteristic of *chlorides*.

(ii) When added of *potassium permanganate*, *chlorine* is evolved.

Arsenic : Not more than 1 part per million,

Lead : Not more than 5 parts per million,.

Residue on ignition : Leaves on evaporation and gentle ignition, not more than 0.01 percent w/w of residue.

Assay : Weigh accurately about 4 g into a stoppered flask containing 40 ml of *water* and titrate with 1 N *sodium hydroxide*, using solution of methyl orange as indicator. Each ml of 1 N *sodium hydroxide* is equivalent to 0.03646 g of HCl.

Storage : Preserved Hydrochloric Acid in well-closed container.

History and authority : The first proving were made under Hahnemann's directions. Allen's Encyclop. Mat. Med. Vol. VI, 415.

Preparation : (a) Mother Solution Drug strength 1/10
Acidum Muriaticum 322 g
Purified Water in sufficient quantity
to make one thousand millilitres of the Mother Solution.

(b) Potencies: 2x and 3x to be prepared with Purified Water. 4x and higher with *Dispensing Alcohol*.

Old method : Class V a,