

Hydrochloric acid, min. 37%, a.p.

CHEMICAL NAME	Hydrochloric acid
CAS NUMBER	7647-01-0
TECHNICAL REQUIREMENTS	<p>Appearance..... transparent, colorless to yellow liquid</p> <p>Hydrogen chloride, % (m/m) min: 37</p> <p>Iron (Fe²⁺), % (m/m).....max. 0.00005</p> <p>Free chlorine,% (m/m)max. 0.0001</p> <p>Sulphuric acid as SO₄²⁻ % (m/m).....max. 0.0002</p> <p>Arsenic, % (m/m).....max. 0.000005</p> <p>Heavy metals precipitated by hydrogen sulphide</p> <p>as Pb²⁺, % (m/m).....max. 0.0002</p> <p>Ca ,% (m/m)..... max. 0,00004</p> <p>Cd ,% (m/m)..... max. 0,000005</p> <p>Cr ,% (m/m)..... max. 0,000005</p> <p>Cu ,% (m/m)..... max. 0,000005</p> <p>Hg ,% (m/m) max. 0,00001</p> <p>Mg ,% (m/m).....max. 0,00001</p> <p>Ni ,% (m/m)..... max. 0,000005</p> <p>Pb ,% (m/m)..... max. 0,000005</p> <p>Sb,% (m/m)..... max. 0,00001</p> <p>Se,% (m/m) max. 0,00001</p> <p>Zn,% (m/m) max. 0,000005</p> <p>Remains after roasting</p> <p>at the temperature 600 °C,% (m/m)..... max. 0,0005</p> <p>TOC,% (m/m)..... max. 0,0005</p>
GENERAL DATA	<p>Molecular weight, g/mol.....36,5</p> <p>Solubility in water unlimited</p> <p>Density at 20 °C, g/ml..... 1,18</p> <p>Odour pungent, suffocating</p> <p>Solidification point, °C.....below -25</p> <p>Breakdown temperature, °C above 75</p>

APPLICATION

Hydrochloric acid min 37%, reagent, applies, among others in chemical methods of quantitative analysis, e.g. alkacymetry, manganometry, in neutralization reactions, in weight analysis. It is a component of royal water used for digestion, in qualitative analysis, e.g. for the detection of silver cations, as well as in many basic reconnaissance reactions in analytical chemistry, consist in in the precipitation of characteristic deposits. Also is a valuable solvent in chemical analysis, also used in geology for the analysis of elements, in the chemical analysis of waters and soils.