

# Hydrochloric acid, 37%, for analysis, ExpertQ®, ACS, ISO, Reag. Ph Eur

## Identification

HCl  
M = 36,46 g/mol  
CAS [7647-01-0]  
EC number: 231-595-7  
Taric code: 2806 10 00

## Synonyms

Hydrochloric acid fuming, Muriatic acid, Hydrogen chloride solution

## Applications

laboratory reagent, acidifying agent, in the production of chlorides, synthesis of organic products.

## Specifications

assay (acidimetric).....	36,5 - 38,0 %	gold (Au).....	max. 0,05 ppm
Identification A (EP).....	passes test	heavy metals.....	max. 1 ppm
Identification chloride.....	passes test	iron (Fe).....	max. 0,1 ppm
appearance of solution.....	clear and colourless	lead (Pb).....	max. 0,01 ppm
colour (Hazen).....	max. 10	lithium (Li).....	max. 0,01 ppm
bromides (Br).....	max. 50 ppm	magnesium (Mg).....	max. 0,05 ppm
phosphates (PO <sub>4</sub> ).....	max. 0,5 ppm	manganese (Mn).....	max. 0,01 ppm
sulfates (SO <sub>4</sub> ).....	max. 1 ppm	mercury (Hg).....	max. 0,01 ppm
sulfites (SO <sub>3</sub> ).....	max. 0,5 ppm	molybdenum (Mo).....	max. 0,01 ppm
free chlorine (as Cl).....	max. 1 ppm	nickel (Ni).....	max. 0,02 ppm
aluminium (Al).....	max. 0,05 ppm	platinum (Pt).....	max. 0,1 ppm
ammonium (NH <sub>4</sub> ).....	max. 1 ppm	potassium (K).....	max. 0,1 ppm
arsenic (As).....	max. 0,01 ppm	silver (Ag).....	max. 0,02 ppm
barium (Ba).....	max. 0,01 ppm	sodium (Na).....	max. 0,3 ppm
beryllium (Be).....	max. 0,01 ppm	strontium (Sr).....	max. 0,01 ppm
bismuth (Bi).....	max. 0,05 ppm	thallium (Tl).....	max. 0,02 ppm
boron (B).....	max. 0,1 ppm	tin (Sn).....	max. 0,2 ppm
cadmium (Cd).....	max. 0,01 ppm	titanium (Ti).....	max. 0,02 ppm
calcium (Ca).....	max. 0,3 ppm	vanadium (V).....	max. 0,01 ppm
chromium (Cr).....	max. 0,01 ppm	zinc (Zn).....	max. 0,1 ppm
cobalt (Co).....	max. 0,01 ppm	zirconium (Zr).....	max. 0,02 ppm
copper (Cu).....	max. 0,01 ppm	residue on ignition.....	max. 3 ppm
gallium (Ga).....	max. 0,05 ppm	residue on evaporation.....	max. 0,001 %
germanium (Ge).....	max. 0,02 ppm	extractable organic substances.....	passes test

## Physical data

- Density: ~ 1,19 g/cm<sup>3</sup>
- Solub. in water: (20 °C): miscible
- Melting point: -28 °C
- Boiling point: ~ 50 °C
- Vapour pressure: (20 °C) 190 hPa
- pH(20 °C) < 1

## Safety - GHS

**Signal Word:** Danger

### Hazard Statements:

- H314: Causes severe skin burns and eye damage.  
H335: May cause respiratory irritation.



### Precautionary Statements:

- P260: Do not breathe dust / fume / gas / mist / vapours / spray.  
P303+P361+P353: IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310: Immediately call a POISON CENTER or doctor / physician.  
P405: Store locked up.  
P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

**Hydrochloric acid, 37%, for analysis, ExpertQ®, ACS, ISO, Reag. Ph  
Eur****Transport/storage**

- ADR: 8 C1 II • UN 1789 • HYDROCHLORIC ACID
- IMDG: 8 II • UN 1789 • HYDROCHLORIC ACID
- IATA/ICAO: 8 II • UN 1789 • HYDROCHLORIC ACID
- PAX: 809
- CAO: 813
- 10°C - 30°C