

**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

**Specifications**

assay (acidimetric).....	34 - 37 %	manganese (Mn).....	max. 0,1 ppb
colour (Hazen).....	max. 10	mercury (Hg).....	max. 0,1 ppb
bromides (Br).....	max. 0,001 %	molybdenum (Mo).....	max. 0,1 ppb
free chlorine (as Cl).....	max. 0,00005 %	neodymium (Nd).....	max. 0,1 ppb
total phosphorus (P).....	max. 10 ppb	nickel (Ni).....	max. 0,5 ppb
total sulfur (S).....	max. 300 ppb	niobium (Nb).....	max. 0,1 ppb
aluminium (Al).....	max. 1 ppb	potassium (K).....	max. 1 ppb
antimony (Sb).....	max. 0,5 ppb	praseodymium (Pr).....	max. 0,1 ppb
arsenic (As).....	max. 0,5 ppb	rhodium (Rh).....	max. 0,1 ppb
barium (Ba).....	max. 0,1 ppb	rhodium (Rh).....	max. 0,1 ppb
beryllium (Be).....	max. 0,1 ppb	rubidium (Rb).....	max. 0,1 ppb
bismuth (Bi).....	max. 0,1 ppb	ruthenium (Ru).....	max. 0,1 ppb
boron (B).....	max. 1 ppb	samarium (Sm).....	max. 0,1 ppb
cadmium (Cd).....	max. 0,1 ppb	scandium (Sc).....	max. 0,1 ppb
calcium (Ca).....	max. 1 ppb	selenium (Se).....	max. 1 ppb
cerium (Ce).....	max. 0,1 ppb	silver (Ag).....	max. 1 ppb
cesium (Cs).....	max. 0,1 ppb	sodium (Na).....	max. 1 ppb
chromium (Cr).....	max. 0,5 ppb	strontium (Sr).....	max. 0,1 ppb
cobalt (Co).....	max. 0,1 ppb	tellurium (Te).....	max. 0,1 ppb
copper (Cu).....	max. 0,5 ppb	terbium (Tb).....	max. 0,1 ppb
dysprosium (Dy).....	max. 0,1 ppb	thallium (Tl).....	max. 0,1 ppb
erbium (Er).....	max. 0,1 ppb	thorium (Th).....	max. 0,1 ppb
europium (Eu).....	max. 0,1 ppb	thulium (Tm).....	max. 0,1 ppb
gadolinium (Gd).....	max. 0,1 ppb	tin (Sn).....	max. 0,5 ppb
gallium (Ga).....	max. 0,1 ppb	titanium (Ti).....	max. 0,5 ppb
gold (Au).....	max. 0,5 ppb	tungsten (W).....	max. 0,1 ppb
hafnium (Hf).....	max. 0,1 ppb	uranium (U).....	max. 0,1 ppb
holmium (Ho).....	max. 0,1 ppb	vanadium (V).....	max. 0,5 ppb
indium (In).....	max. 0,1 ppb	ytterbium (Yb).....	max. 0,1 ppb
iron (Fe).....	max. 1 ppb	yttrium (Y).....	max. 0,1 ppb
lanthanum (La).....	max. 0,1 ppb	zinc (Zn).....	max. 1 ppb
lead (Pb).....	max. 0,1 ppb	zirconium (Zr).....	max. 0,1 ppb
lithium (Li).....	max. 0,1 ppb		
lutetium (Lu).....	max. 0,1 ppb		
magnesium (Mg).....	max. 0,5 ppb		

**Packaging**
**Packaging Code**

500 ml ☉ AC07800500  
 1 l ☉ AC07801000  
 2,5 l ☉ AC07802500

**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.

P321: Specific treatment (see on this label).

P405: Store locked up.

P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

**Toxicological data**• MAK: 2 ml/m<sup>3</sup>, 3,0 mg/m<sup>3</sup>

• WGK: 1

• Poison class CH (Swiss): 2

**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

• Store below 25°C