

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, in pharma industry.

Specifications

assay (acidimetric).....	36,5 - 38,0 %	free chlorine (as Cl).....	max. 4 ppm
Identification chloride.....	passes test	sulfates (SO ₄).....	max. 20 ppm
Identification A (EP).....	passes test	sulfates (SO ₄).....	passes test
Identification 1 (JP).....	passes test	sulfites (SO ₃).....	passes test
appearance of solution.....	clear and colourless	arsenic (As).....	max. 1 ppm
bromine or chlorine.....	passes test	heavy metals (as Pb).....	max. 5 ppm
bromide or iodide.....	passes test	mercury (Hg).....	max. 0,04 ppm
free bromine or chlorine.....	passes test	residue on ignition (as SO ₄).....	max. 0,008 %
		residue on evaporation.....	max. 0,01 %

Physical data

- Density: ~ 1,19 g/cm³
- 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.

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