



PRODUCT CODE: 471020

Hydrochloric Acid 37% (max. 0.0000005% Hg) for analysis, ACS, ISO

HCl

M.= 36,46

CAS [7647-01-0]

EINECS 231-595-7

TARIC 2806 10 00 00

SYNONYMS: Muriatic Acid

PHYSICAL DATA: liquid, Clear, Colourless, Miscible with water D 20/4 1,19 • M.P.: -25 °C • B.P.: 85 °C • Vap. press. (20 °C) 20 hPa •

BIBLIOGRAPHY: Merck Index **13**, 4.801 14, 4.780 Sax **HHL000** • Safety **2**, **1892 D** • Römp **8**, **3672** • Fieser **4450 5333 6283** • ACS **XI** • ISO 6353-2/1983 R - 13, 17 • BP.**2018** • USP -**NF 36** • Ph. Eur. **8.0** (2014) **9.0** (2017) • F.C.C **10 11** • BOE **243**(8-10-2009) • Regulation (EU) n° 231/2012JP XIII, 423 •

HAZARDOUS: C.E: 017-002-01-X • RTECS: MW 4025000 • LD50 oral rbt 900 mg/kg • LC L0 inh hmn 1300 ppm / 30 min • LC50 inh hmn 3124 ppm / 1h • VLA-EC (HCl) 10 ppm15 mg/m3 VLA-ED (HCl) 7,6 mg/m3 VLA-ED (HCl) 5 ppm



H: H290 • H335 • H314 •

P: P234 • P390 • P406 • P264 • P280 • P302+P352 • P321 • P332+P313 • P362 • P305+P351+P338 • P337+P313 • P261 • P271 • P304+P340 • P403+P233 • P312 • P405 • P501 •

TRANSPORT REGULATIONS: UN: 1789 • ADR: 8/II • IMDG: 8/II • IATA: 8/II • PAX: 851 • CAO: 855 • (E) •

WEIGHT/VOLUME INFORMATION: 1l~1,19 kg 1kg~0,84 l

OBSERVATIONS: Product controlled as a drug precursor. •

SPECIFICATIONS:

| | |
|-----------------|-------------|
| Assay (Acidim.) | 36,5-38,0 % |
|-----------------|-------------|

| | |
|-----------------|---------|
| Density at 15/4 | >= 1,19 |
|-----------------|---------|

Maximum limit of impurities

| | |
|---|-------------|
| APHA colour | 10 |
| Appearance | passes test |
| Residue on ignition (as SO ₄) | 0,0005 % |
| Chlorine (Cl) | 0,0001% |
| Ammonium (NH ₄) | 0,0003% |
| Bromide (Br) | 0,005% |
| Sulfate (SO ₄) | 0,0001% |
| Sulfite (SO ₃) | 0,0001% |
| Extractable organic substances | passes test |
| Heavy Metals (ICP-OES) | 0,0001 % |

| | |
|----|------------|
| Hg | 0,0000005% |
|----|------------|

Metals by ICP [in mg/Kg (ppm)]

| | |
|----|------|
| Ag | 0,05 |
| Al | 0,1 |
| As | 0,01 |
| Au | 0,1 |
| B | 0,2 |
| Ba | 0,05 |
| Be | 0,02 |
| Bi | 0,05 |
| Ca | 0,5 |
| Cd | 0,01 |
| Co | 0,01 |
| Cr | 0,02 |
| Cu | 0,02 |
| Fe | 0,1 |
| Ga | 0,05 |
| Ge | 0,02 |
| In | 0,05 |
| K | 0,1 |
| Li | 0,02 |
| Mg | 0,1 |
| Mn | 0,01 |
| Mo | 0,01 |
| Na | 0,5 |
| Ni | 0,02 |
| Pb | 0,02 |
| Pt | 0,1 |
| Sb | 0,01 |
| Si | 0,1 |
| Sn | 0,1 |
| Sr | 0,02 |
| Ti | 0,02 |
| Tl | 0,02 |
| V | 0,01 |
| Zn | 0,05 |
| Zr | 0,02 |