



PRODUCT CODE: 141020

Hydrochloric Acid 37% (USP-NF, BP, Ph. Eur.) pure, pharma grade

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,2020** • **USP -NF 37** • Ph. Eur. **9.0** (2017) **10.0** (2020) • 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 %
Identity :
Identity according to Pharmacopoeias: passes test

Maximum limit of impurities

Appearance of solution passes test
Non-volatile matter 0,01 %
Residue on ignition (as SO₄) 0,005 %
Chlorine (Ph. Eur.) 0,0004%
Ammonium (NH₄) 0,001%
Sulfate (SO₄) 0,0005%
Sulfate (SO₄) (USP-NF) passes test
Sulfite (USP-NF) passes test
Residual solvents (Ph.Eur/USP) passes test

Bromine or Chlorine (USP-NF) passes test
Bromide or Iodide (USP-NF) passes test

Elemental impurities (ICH Q3D):

Class 1

Cd 0,5 ppm
Pb 0,5 ppm
As 1,5 ppm
Hg 1,5 ppm

Class 2A

Co 5 ppm
V 10 ppm
Ni 20 ppm

Class 2B

Tl 0,8 ppm
Au 10 ppm
Pd 10 ppm
Ir 10 ppm
Os 10 ppm
Rh 10 ppm
Ru 10 ppm
Se 15 ppm
Ag 15 ppm
Pt 10 ppm

Class 3

Li 55 ppm
Sb 120 ppm
Ba 140 ppm
Mo 25 ppm
Cu 250 ppm
Sn 600 ppm
Cr 25 ppm