



**PRODUCT CODE: 141020**

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

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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 %
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 SO <sub>4</sub> )	0,005 %
Chlorine (Ph. Eur.)	0,0004%
Ammonium (NH <sub>4</sub> )	0,001%
Sulfate (SO <sub>4</sub> )	0,0005%
Sulfate (SO <sub>4</sub> ) (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
Heavy metals (as Pb)	0,0002%

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