



PRODUCT CODE: AL1021

Hydrochloric Acid 1 mol/l (1N) pharma grade

Indicator: Methyl Red.

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 1,011 • pH1 •

BIBLIOGRAPHY: F.C.C IV194 10218 • BOE 243(8-10-2009) • Regulation (EU) n° 231/2012 •

HAZARDOUS: LC50 rat 3124ppm (V) / 1h • VLA-EC (HCl) 10 ppm15 mg/m3 VLA-ED (HCl) 7,6 mg/m3 VLA-ED (HCl) 5 ppm



H: H290 •

P: P234 • P390 • P406 •

TRANSPORT REGULATIONS: UN: 1789 • ADR: 8/III • IMDG: 8/III • IATA: 8/III • PAX: 852 • CAO: 856 • (E) •

WEIGHT/VOLUME INFORMATION: 1l~1,011 kg 1kg~0,989 l

OBSERVATIONS: Product controlled as a drug precursor. •

SPECIFICATIONS:

Titer at 20°C

1,00±0,01

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 ₄)	0,005 %
Chlorine	0,0004%
Ammonium (NH ₄)	0,001%
Bromide (Br)	0,01%
Sulfate (SO ₄)	0,0005%
Sulfite	0,0005%
Residual solvents (Ph.Eur/USP)	passes test
Bromine or Chlorine	passes test
Bromide or Iodide	passes test
Heavy metals (as Pb)	0,0002%
Fe	0,0001 %
Elemental impurities (ICH Q3D):	
Class 1	
Cd	0,5 ppm
Pb	0,5 ppm
As	1 ppm
Hg	0,04 ppm
Class 2A	
Co	5 ppm
V	10 ppm
Ni	2 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	2 ppm
Sn	600 ppm
Cr	25 ppm

This product has been manufactured with raw material which passes the RFE, USP-NF, BP, Ph. Eur., JP specifications.