



PRODUCT CODE: 192109

Hydrochloric Acid 5 mol/l (5N) pharma grade

Indicator: Methyl Red

HCl

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 1,08 • pH1 •

BIBLIOGRAPHY:

HAZARDOUS: C.E: 017-002-01-X • LC50 inh rat 3124 ppm / 1h • VLA-EC (HCl) 10 ppm15 mg/m3 VLA-ED (HCl) 7,6 mg/m3 VLA-ED (HCl) 5 ppm



H: H319 • H335 • H315 • H290 •

P: P261 • P405 • P305+P351+P338 • P280 • P501 • P403+P233 •

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

WEIGHT/VOLUME INFORMATION: 1l-1,08 kg 1kg-0,93 l

OBSERVATIONS: Product controlled as a drug precursor. •

SPECIFICATIONS:

Titer at 20°C	1,00 ± 0,01
Identity :	
Identity according to Pharmacopoeias:	passes test
Appearance of solution	passes test
Non-volatile matter	0,01 %
Residue on ignition (as SO4)	0,008 %
Chlorine Free (Ph. Eur.)	0,0004 %
Sulfate (SO4)	0,002 %

Sulfate (SO ₄) (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 ppm
Hg	0,04 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

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