



# Certificate of Analysis

1.00317.1000 Hydrochloric acid fuming 37% for analysis EMSURE® ACS,ISO,  
Reag. Ph Eur

Batch Z0830017

	Spec. Values		Batch Values	
Assay (alkalimetric)	37.0 - 38.0	%	37.2	%
Identity	passes test		passes test	
Color	≤ 10	Hazen	< 10	Hazen
Appearance	passes test		passes test	
Appearance of solution	passes test		passes test	
Bromide (Br)	≤ 50	ppm	40	ppm
Free chlorine (Cl)	≤ 1	ppm	< 1	ppm
Phosphate (PO <sub>4</sub> )	≤ 0.5	ppm	< 0.1	ppm
Sulfate (SO <sub>4</sub> )	≤ 1.0	ppm	< 1.0	ppm
Sulfite (SO <sub>3</sub> )	≤ 0.5	ppm	< 0.5	ppm
Heavy metals (as Pb)	≤ 1	ppm	< 1	ppm
Ag (Silver)	≤ 0.020	ppm	< 0.010	ppm
Al (Aluminium)	≤ 0.050	ppm	0.028	ppm
As (Arsenic)	≤ 0.010	ppm	< 0.010	ppm
Au (Gold)	≤ 0.050	ppm	< 0.010	ppm
B (Boron)	≤ 0.100	ppm	< 0.050	ppm
Ba (Barium)	≤ 0.010	ppm	< 0.010	ppm
Be (Beryllium)	≤ 0.010	ppm	< 0.010	ppm
Bi (Bismuth)	≤ 0.050	ppm	< 0.010	ppm
Ca (Calcium)	≤ 0.300	ppm	0.150	ppm
Cd (Cadmium)	≤ 0.010	ppm	< 0.005	ppm
Co (Cobalt)	≤ 0.010	ppm	< 0.005	ppm
Cr (Chromium)	≤ 0.010	ppm	< 0.005	ppm
Cu (Copper)	≤ 0.010	ppm	< 0.005	ppm
Fe (Iron)	≤ 0.100	ppm	< 0.050	ppm
Ga (Gallium)	≤ 0.050	ppm	< 0.010	ppm
Ge (Germanium)	≤ 0.020	ppm	< 0.020	ppm
Hg (Mercury)	≤ 0.010	ppm	< 0.010	ppm
K (Potassium)	≤ 0.100	ppm	< 0.050	ppm
Li (Lithium)	≤ 0.010	ppm	< 0.005	ppm
Mg (Magnesium)	≤ 0.050	ppm	0.016	ppm
Mn (Manganese)	≤ 0.010	ppm	< 0.010	ppm
Mo (Molybdenum)	≤ 0.010	ppm	< 0.010	ppm
NH <sub>4</sub> (Ammonium)	≤ 1	ppm	< 1	ppm
Na (Sodium)	≤ 0.300	ppm	0.059	ppm
Ni (Nickel)	≤ 0.020	ppm	< 0.010	ppm
Pb (Lead)	≤ 0.010	ppm	< 0.005	ppm
Pt (Platinum)	≤ 0.100	ppm	< 0.050	ppm
Sn (Tin)	≤ 0.200	ppm	< 0.100	ppm
Sr (Strontium)	≤ 0.010	ppm	< 0.010	ppm
Ti (Titanium)	≤ 0.020	ppm	< 0.010	ppm

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Tl (Thallium)	≤ 0.020	ppm	< 0.010	ppm
V (Vanadium)	≤ 0.010	ppm	< 0.010	ppm
Zn (Zinc)	≤ 0.100	ppm	0.049	ppm
Zr (Zirconium)	≤ 0.020	ppm	< 0.010	ppm
Extractable organic substances	≤ 5	ppm	< 5	ppm
Residue on ignition (as SO <sub>4</sub> )	≤ 3	ppm	< 2	ppm
Non volatile matter	≤ 10	ppm	< 5	ppm

Expiry date : see product label

Date of release (DD.MM.YYYY) 22.09.2022

Dr. Nina Hegmann

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Responsible laboratory manager quality control

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