



Certificate of Analysis

1.00314.2500 Hydrochloric acid fuming 37% EMPROVE® ESSENTIAL Ph Eur, BP, ChP,
JP, NF
Batch Z0908514

	Spec. Values		Batch Values	
Assay (alkalimetric)	37.0 - 38.0	%	37.1	%
Identity	passes test		passes test	
Appearance of solution	passes test		passes test	
Bromide, Iodide (Br, I)	passes test		passes test	
Bromide or iodide (ChP)	passes test		passes test	
Free bromine or chlorine (NF-meth.)	passes test		passes test	
Free chlorine or bromine (ChP)	passes test		passes test	
Free chlorine (Cl)	≤ 0.0001	%	< 0.0001	%
Sulfate (SO ₄)	≤ 0.0005	%	< 0.0002	%
Sulfite (SO ₃)	≤ 0.0010	%	< 0.0005	%
Heavy metals (as Pb)	≤ 0.0001	%	< 0.0001	%
As (Arsenic)	≤ 0.00010	%	< 0.00005	%
Ca (Calcium)	≤ 0.0010	%	< 0.0005	%
Fe (Iron)	≤ 0.0001	%	< 0.0001	%
Hg (Mercury)	≤ 0.000004	%	< 0.000002	%
Residual solvents (ICH Q3C)	...excluded by production process		...excluded by production process	
Residue on ignition (as SO ₄)	≤ 0.002	%	< 0.002	%
Evaporation residue	≤ 0.005	%	< 0.003	%

Elemental impurity specifications have been set considering ICH Q3D (Guideline for Elemental Impurities). Class 1-3 elements are not likely to be present above the ICH Q3D option 1 limit, unless specified and indicated (*).

Corresponds Ph Eur, BP, ChP, JP, NF

Expiry date : see product label

Date of manufacture (DD.MM.YYYY) 28.11.2023

Date of examination (DD.MM.YYYY) 15.01.2024

Dr. Nina Hegmann

Responsible laboratory manager quality control

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