

## Specification

## 4.80592.9010 Hydrochloric acid 10% EMPROVE® EXPERT Ph Eur, JP, NF

	Specification	
Assay (alkalimetric)	9.5 - 10.0	%
Assay (alkalimetric)	10.0 - 10.5	% (w/v)
Identity	passes test	
Color	≤ 10	Hazen
Appearance	passes test	
Bromide or iodide	passes test	
Free bromine or chlorine	passes test	
Free chlorine (CI)	≤ 0.0001	%
Sulfate (SO <sub>4</sub> )	≤ 0.0005	%
Sulphite (SO <sub>3</sub> )	≤ 0.001	%
Heavy metals (as Pb)	≤ 0.0001	%
As (Arsenic)	≤ 0.000015	%
Hg (Mercury)	≤ 0.0000010	%
Residual solvents (ICH Q3C)	excluded by production process	
Evaporation residue	≤ 0.01	%
Residue on ignition (as SO <sub>4</sub> )	≤ 0.008	%
Endotoxins	≤ 2.5	I.U./ml
Lotnumber (raw material)		

Filtered with 0.2 µm

Manufactured from Hydrochloric acid fuming 37% EMPROVE® ESSENTIAL PhEur, BP, JP, NF and purified water acc. PhEur, JP.

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 to Ph Eur, JP, NF

Dr. Reiner Vogt

Responsible laboratory manager quality control

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