

**MP Biomedicals, LLC**

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Certificate of Analysis

Product Description: Hydrochloric Acid, ACS_

Catalog Number: 194054_

Lot: 4545C_

Formula: HCl

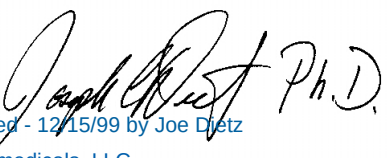
CAS #: 7647-01-0

Physical Description: Clear, Colorless Liquid

Formula Weight: 36.50

Storage: Room Temperature, desiccate

Test	Specification	Result
Assay	36.5 - 38%	37.4%
Appearance:	Free from suspended matter or sediment,	Passes
Color (APHA)	≤10	<10
Residue after Ignition	≤5 ppm	<3 ppm
Bromide (Br)	≤0.005%	<50 ppm
Sulfate (SO ₃)	≤1 ppm	<0.5 ppm
Sulfite (SO ₃)	≤1 ppm	<0.8 ppm
Free Chlorine (Cl)	≤1 ppm	<1.0 ppm
Ammonium (NH ₄)	≤3 ppm	<3 ppm
Arsenic (As)	≤0.01 ppm	<5 ppb
Heavy Metals (as Pb)	≤1 ppm	<0.1 ppm
Iron (Fe)	≤0.2 ppm	<0.2 ppm
Extractable Organic Substances:	≤5 ppm	<2 ppm


Approved - 12/15/99 by Joe Dietz
MP Biomedicals, LLC.
Technical Director

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Online Ordering, MSDSs, certificates of analysis and data sheets now available on our web site

Technical Service: 1-800-279-5490 (440-337-1200) Customer Service: 1-800-854-0530 (440-337-1200)