

**MP Biomedicals, LLC**

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Certificate of Analysis

Product Description: Choline Chloride, cell culture reagent

Catalog Number: 194639

Lot: 5859H

Formula: $C_5H_{14}NOCl$

CAS #: 67-48-1

Physical Description: White Crystalline Powder

Formula Weight: 139.63

Storage: Room Temperature, desiccate

Test	Specification	Result
Identity Test	Passes	Passes
Purity	$\geq 99\%$	99.7%
pH	Neutral to Litmus	4.4
Water	$\leq 0.5\%$	0.1%
Solubility (10% aq soln)	Clear, Colorless Solution	Clear, Colorless Solution

1,4-Dioxane < 10 ppm

Heavy Metals < 10 ppm

Residue on Igniton < 0.05%

Total Amines < 10 ppm

Arsenic < 2 ppm

Lead < 0.3 ppm

Total Arobic Count < 1000 cfu/g

Yeast & Mold < 100 cfu/g

Total Coliform < 10 cfu/g

E Coli negative/10 g

Salmonella negative/25 g

Staphylococcus Aureus negative/10g


12/07/2004 - Joseph Dietz, Ph.D.

MP Biomedicals, LLC.

Technical Director

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<http://www.mpbio.com>

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)