

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.com

Email USA: techserv@sial.com

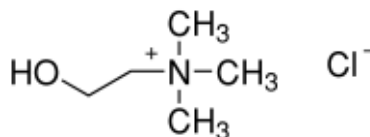
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:

Choline chloride - powder, BioReagent, suitable for cell culture, suitable for insect cell culture, ≥98%

Product Number: C7527
Lot Number: SLBB8921V
Brand: SIGMA
CAS Number: 67-48-1
MDL Number: MFCD00011721
Formula: C₅H₁₄ClNO
Formula Weight: 139.62 g/mol
Quality Release Date: 10 FEB 2012
Recommended Retest Date: FEB 2014



Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder	Powder
Solubility (Color)	Colorless	Colorless
Solubility (Turbidity)	Clear	Clear
200 mg plus 4 mL of water		
Water (by Karl Fischer)	≤ 1.0 %	0.2 %
Carbon (anhydrous)	41.9 - 44.0 %	43.4 %
Nitrogen (anhydrous)	9.5 - 10.5 %	10.1 %
Cell Culture Test	Pass	Pass
Insect Cell Test	Pass	Pass
Assay	≥ 98.0 %	100.0 %
Anhydrous basis		
Recommended Retest Period	-----	-----
2 years		

Rodney Burbach, Manager
 Analytical Services
 St. Louis, Missouri US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.