

Glentham Life Sciences Ltd Unit 5 Leafield Way Corsham SN13 9SW United Kingdom

+44 (0) 1225 667 798 t: f: +44 (0) 2033 978 909 e: info@glentham.com www.glentham.com

Certificate of Analysis

Choline chloride, USP grade Glentham Code GV9961 **CAS Number** 67-48-1 **EINECS** 200-655-4 MDL Number MFCD00011721 Additional CAS 62-49-7

Batch Number 310GIV Molecular Weight 139.63

Product Name

Molecular Formula C₅H₁₄CINO Storage Temp. +20°C

CI-

Property Specification Batch 310GIV Physical Description Colourless crystals or white crystalline powder Conforms Identification A, B according to USP Conforms pH (10% in water) 4.0 - 7.0 5.6 ≤ 0.05% 0.03% Residue on Ignition **Heavy Metals** Conforms ≤ 10ppm Lead (Pb) To pass test Conforms Arsenic (As) ≤ 1ppm Conforms Conforms Mercury (Hg) ≤ 0.1ppm Cadmium (Cd) ≤ 1ppm Conforms Any Individual Impurity ≤ 0.3% Conforms ≤ 2.0% **Total Impurities** Conforms 1,4-Dioxane ≤ 10µg/g Conforms **Total Amines** ≤ 10µg/g Conforms Water 0.3% ≤ 0.5% Assay 99.0 - 100.5 % (anhydrous basis) 99.2% Pharmacopoeia Specification(s) Conforms

Specification Version v1.0 Manufacture Date 2023-02-20 Re-Test Date 2029-05-18

Glentham Life Sciences confirm that the above referenced product conformed to the information displayed in this document on the quality release date. Please check www.glentham.com or contact us using the details above for the current version of this document.

This document was generated electronically and is therefore valid without signature. © Glentham Life Sciences Ltd, 2025

Page 1 of 1 Printed: 2025-04-19 00:38:44