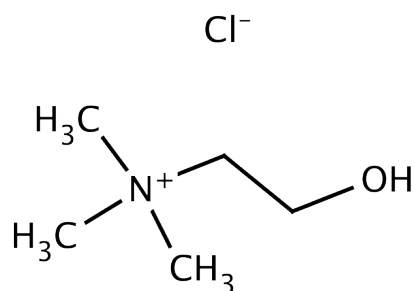


Product Specification

Product Name : Choline chloride, USP grade
Glentham Code : GV9961
CAS Number : 67-48-1
EINECS : 200-655-4
MDL Number : MFCD00011721

Molecular Weight : 139.63
Molecular Formula : C₅H₁₄ClNO
Storage Temp. : +20°C



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

Specification Version : v1.0
Date Created : 2017-08-24

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.

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