

Item Number	C2052
Item	Choline Bitartrate, USP Dietary Supplement
CAS Number	87-67-2
Molecular Formula	C <sub>9</sub> H <sub>19</sub> NO <sub>7</sub>
Molecular Weight	253.25
MDL Number	
Synonyms	(2-Hydroxyethyl)trimethylammonium Bitartrate ; Choline Acid Tartrate ; Choline Hydrogen Tartrate ; CBT

Test	Specification	
	Min	Max
APPEARANCE		
ASSAY (ANHYDROUS BASIS)	96.5	100.5 %
OPTICAL ROTATION	+17.5° to +18.5°	
pH (1 in 10 SOLUTION)	3.0	4.0
CONTENT OF CHOLINE	40.0	41.3 %
CONTENT OF BITARTRATE	56.5	59.2 %
ELEMENTAL IMPURITIES	AS REPORTED	
ARSENIC		2 ppm
LEAD		0.3 ppm
TOTAL AMINES		10 µg/g
1,4-DIOXANE		10 µg/g
RESIDUE ON IGNITION		0.1 %
WATER DETERMINATION		0.5 %
RELATED COMPOUNDS:		
CHOLINE RELATED COMPOUND A		0.1 %
ANY UNSPECIFIED IMPURITY		0.1 %
TOTAL IMPURITIES		0.5 %
IDENTIFICATION (A) FTIR	SPECTRUM MATCHES REFERENCE	
IDENTIFICATION (B)	WHITE PRECIPITATE FORMS	
IDENTIFICATION (C)	RETENTION TIME CORRESPONDS TO STANDARD	
EXPIRATION DATE		

Test	Specification	
	Min	Max
DATE OF MANUFACTURE		
MONOGRAPH EDITION		
RESIDUAL SOLVENTS	AS REPORTED	
CLASS 3 (solvent) / ETHANOL		

***Spectrum Chemical Mfg Corp***

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