



Certificate of Analysis

Product Name:	Betaine HCL (TMG)	Batch Number:	Varies
CAS No.	590-46-5	Manufacture Date:	Varies
Molecular Formula:	C ₅ H ₁₂ ClNO ₂	Expiry Date:	Varies

IDENTIFICATION		SPECIFICATION	RESULT
Assay		≥ 98.0%	99.26%
Physical	Appearance	White crystalline granular	Complies
	Loss on drying	≤ 0.5%	0.10%
	Residue on ignition	≤ 0.2%	0.11%
	Particle size	pass 20 mesh	100%
		pass 40 mesh	39%
		pass 60 mesh	10%
	pH (1 in 4 solution)	0.8 - 1.2	0.85
Chemical	Heavy Metals	≤ 10 ppm	Complies
	Lead (Pb)	≤ 1 ppm	Complies
	Arsenic (As)	≤ 1 ppm	Complies
	Cadmium (Cd)	≤ 0.2 ppm	Complies
	Mercury (Hg)	≤ 0.2 ppm	Complies
Microbial	Total Plate Count	≤ 1000 cfu/g	Complies
	Yeast & Mold	≤ 100 cfu/g	Complies
	E. Coli, Salmonella, Staphylococcus	Negative	Complies

Else	Storage condition	Sealed, kept in shady and dry place
	Shelf life	Three years

