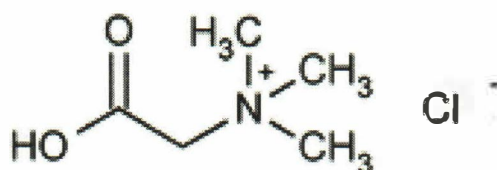


Betaine HCl USP

Batch no 170260510
 Mf date May 10 2026
 Retest May 09 2029
 Batch size 900 kg

Molecular Structure



Molecular Formula $C_5H_{11}NO_2 \cdot HCl$
 Molecular Weight 153.61
 CAS Registry Number 590-46-5

Jun 22 2026

<u>Tests</u>	<u>Specifications</u>	<u>Results</u>
Appearance	White crystalline powder	Conforms
Identification	IR, Chloride test	Positive
pH (1 in 4)	0.8 ~ 1.2	1.0
Water	≤ 0.5%	0.19%
Residue on ignition	≤ 0.1%	0.07%
Heavy metals	≤ 10 ppm	< 10 ppm
Arsenic (As)	≤ 2 ppm	< 2 ppm
Lead (Pb)	≤ 0.3 ppm	< 0.3 ppm
Mercury (Hg)	≤ 0.1 ppm	< 0.1 ppm
Cadmium (Cd)	≤ 1 ppm	< 1 ppm
Microbiological		
Total plate counts	≤ 1000 cfu/gr	< 1000 cfu/gr
Yeasts & molds	≤ 100 cfu/gr	< 100 cfu/gr
E. Coli	Negative/25 gr	Negative
Salmonella	Negative/25 gr	Negative
Staphylococcus aureus	Negative/25 gr	Negative
Particle size	≥ 95% through 20 mesh	98.8%
Assay (oab)	99.0 ~ 100.5% of $C_5H_{11}NO_2 \cdot HCl$	99.2%

Packaging & storage	Preserve in tight and light-resistant containers. Store at room temperature
Conclusion	Material complies with USP