

Certificate of Analysis

Product Name	Spermidine Trihydrochloride	Batch No.	QY-YJAS2030511
Molecular formula	C ₇ H ₁₉ N ₃ • 3HCl	Manufacturing Date	2023-05-11
Cas No.	334-50-9	Expiration Date	2025-05-10

Item	Specification	Result
Assay(GC)	≥98%	99.17%
Appearance	White to off-white powder	Conforms
Analytical Quality		
Identification	¹ HNMR confirms to structure	Conforms
Loss on drying	≤1.0%	0.41%
Residue on ignition	≤0.2%	0.06%
Solubility	Soluble in water	Conforms
Melting point	257-259°C	257.2-258.5° C
Total Heavy Metals		
Arsenic(As)	≤0.15ppm	<3.0ppm
Lead(Pb)	≤0.5ppm	<10.0ppm
Mercury(Hg)	≤1.5ppm	<1.0ppm
Cadmium(Cd)	≤2.5ppm	<1.0ppm
Conclusion	Conform with specification	

Storage Cool & dry place.Do not freeze.Keep away from strong light and heat.

Shelf Life 24 months under the conditions above and in its original packaging.

Package In double sealed PP bags, 10/25kgs Drum.

Tested by: Mr Chen Date: 2023-05-14