## Wuhan HengHeDa Pharm Co., Ltd

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## **CERTIFICATE OF ANALYSIS**

Product name	Spermidine Trihydrochloride	HCI HCI HCI H <sub>2</sub> N N NH <sub>2</sub>		
CAS NO	334-50-9			
Molecular formula	C7H22Cl3N3			
Molecular weight	254.63			
Quantity	5kg			
Batch NO	HHD20210725			
Production date	2021.07.25			
Expiry Date	2023.07.24			
Test based on enterprise standard				
Test Item	Specification		Result	
Appearance	White to off-white powder		Conforms	
Identification	1HNMR confirms to structure		Conforms	
Solubility	Soluble in water		Conforms	
Loss on drying	≤1.0%		0.42%	
Residue on ignition	≤0.2%		0.07%	
Heavy metals	≤10ppm		Conforms	
Pb	≤0.5ppm		Conforms	
As	≤0.15ppm		Conforms	

Cd	≤2.5ppm	Conforms
Hg	≤1.5ppm	Conforms
Purity (GC)	≥98.0%	99.20%

Storage	Store in a well-closed and dry place with room temperature and		
	no direct sun light.		
Shelf life	2 years when properly stored.		

Conclusion: This product complies with above specification.

Inspector

Shen Wu

