Methylene Blue Powder, USP/Pharma Grade

CAS Number: 122965-43-9, 7720-79-3

CAS Number: 319.86 (anhydrous basis)

Test	Specification
Appearance	Dark green or blue crystalline powder having a bronze-like luster
Solubility (1% in water)	Clear blue solution
Assay (dry weight basis)	≥97.0 to ≤103.0%
Loss on Drying (105°C, >3h)	8-24%
Identification Tests:	
A: Infrared Spectrum	Confirms
B: Retention Time (RT)	The RT of major pick confirms
C: Identification of Chloride	
Residue on Ignition	≤0.15%
Absorption maximum (50% in ethanol)	662-665 nm
Heavy Metals	≤8 ppm
Cations:	
Copper (Cu)	≤200 ppm
Zinc (Zn)	≤100 ppm

Test	Specification
Arsenic (As)	≤2 ppm
Organic Impurities:	
Azure B	<2.5%
Any unspecified impurity	≤0.10%
Total impurities (excluding Azure B)	≤0.50%
Bacterial endotoxin test	≤2.5 EU/mL
Microbial Enumeration Test (TAMC)	< 1000 cfu/g
Yeast and Mold	<100 cfu/g