

Certificate of Analysis

Product	Methylene blue (C.I. 52015) pure USP (pharma grade)
Product number	LC-8718
Lot number	65424C01
Synonyms	Methylthioninium chloride
Formula	$C_{16}H_{18}ClN_3S \times H_2O$
Molecular weight	319.86 g/mol
CAS number	122965-43-9
Storage	below 25°C
Manufacturing date	November 2023
Retest period (months)	60
Retest date	November 2028

We herewith confirm that this product meets the requirements of the US Pharmacopoeia (USP).

Parameter	Specification	Result
Assay (titr., calc. on dried basis)	97.0 - 103.0 %	98.68%
Identity	passes test	complies
Absorbance (1 % in water) λ_{max}	> 2200	2390
Absorption maxima λ_{max} . in water	663 - 667 nm	complies
Residue on ignition (Ash)	max. 0.15 %	complies
Loss on drying (105°C)	8.0 - 22.0 %	11.82%
Arsenic (As)	max. 0.0008 %	0.000152%
Copper (Cu)	max. 0.02 %	complies
Zinc (Zn)	max. 0.01 %	complies
Iron (Fe)	max. 0.05 %	complies
Lead (Pb)	max. 0.002 %	0.000177%
Organic impurities	max. 0.05 %	complies
Microbial load	passes test	complies



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The information listed above does not release the customer from the obligation of incoming goods inspection.