

CERTIFICATE OF ANALYSIS

Product Name	Citicoline Sodium	Batch No	PY-CS20190126
Quantity	500KG	Analysis Date	Jan.28,2019
Mfg. Date	Jan.26,2019	Exp. Date	Jan.25,2022
Package	25kg/Drum	Standard	CP2015

No.	Item	Specification	Result
1.	Description	White or crystalloid powder, smell-less. Soluble easily in water, insoluble in ethanol, acetone and chloroform	Complies
2.	Identification	1)Chemical reaction 2)The retention time of a major peak meets the requirement 3)IR:consistent with the spectrum obtained with reference Substance 4) Show sodium flame	Positive reaction Complies Complies Positive reaction
3.	pH	6.0~7.5	6.4
4.	Clarity and Color of Solution	Clarifying,colorless	Complies
5.	Chlorides(Cl)	≤0.05%	Complies
6.	Ammonium	≤0.05%	Complies
7.	Iron	≤0.01%	Complies
8.	Phosphate	≤0.1%	Complies
9.	Related Substance	5'-CMP≤0.3% The other largest impurities≤0.2% The other total impurities≤0.7%	0.033% 0.021% 0.040%
10.	Residual Solvents	Methanol≤0.3% Ethanol≤0.5% Acetone≤0.5%	Complies Complies Complies
11.	Loss on Drying	≤6.0%	2.3%
12.	Heavy Metals	≤5ppm	Complies
13.	As	≤1ppm	Complies
14.	Assay	≥98% (C ₁₄ H ₂₅ N ₄ NaO ₁₁ P ₂)	99.5%
15.	Conclusion	Conform with the CP2015 Standard.	

Analyst: xuli

QC: lixiaochen