

CERTIFICATE OF ANALYSIS

Product name	NAD+		
Cas No.	53-84-9		
Molecular Formula	C ₂₁ H ₂₇ N ₇ O ₁₄ P ₂		
Batch Number	20230223	Manufacture Date	20230223
Report Date	20230223	Expiry Date	20250222

Testing Items	Specifications	Results
Appearance	White to yellowish powder or crystalline powder	Conforms
Identification	Conform with NMR	Conforms
Na Content (ICP-OES)	≤0.5%	0.01%
Water	≤ 10.0%	4.7%
PH	2.0-4.0	3.3
Purity (HPLC)	≥98.5%	99.71%
Assay	≥97.0%	99.28%
Heavy metal		
Lead(Pb)	≤0.5ppm	Conforms
Arsenic(As)	≤0.5ppm	Conforms
Cadmium(Cd)	≤0.5ppm	Conforms
Mercury(Hg)	≤0.5ppm	Conforms
Spectroscopy Detection		
A340/A260	0.39-0.47 (0.43±0.04)	0.42
A250/A260	0.75-0.91 (0.83±0.08)	0.83
A280/A260	0.19-0.23 (0.21±0.02)	0.22
ε260 (pH=7.5)	16.2- 19.8(10 ³ L·mol ⁻¹ ·cm ⁻¹) (18 .0± 1.8) ×10 ³	17.9×10 ³
ε340 (pH=10)	5.7-6.9(10 ³ L·mol ⁻¹ ·cm ⁻¹) (6.3±0.6) ×10 ³	6.5×10 ³
Residual Solvent		
Methanol	≤ 1.0%	N.D
Ethanol	≤2.0%	0.02%
Microbial		
Colonies Number	≤750CFU/g	<10CFU/g
Escherichia Coli	<3MPN/g	N.D

Storage: Store in tight, light-resistant containers, avoid exposure to direct sunlight, moisture and excessive heat.

Shelf Life: 24 months if store under the conditions above and stay in original packaging.

