

# CERTIFICATE OF ANALYSIS

Product Name:	β-Nicotinamide Adenine Dinucleotide (NAD <sup>+</sup> )	CAS No.:	53-84-9
Batch/Lot No.:	BCKZ241220-1	Specification:	500 mg
Manufacture Date:	2024-12-20	Test Date:	2024-12-21
Retest Date:	2026-12-19	Reference Standard:	In-House Standard

## ANALYTICAL TEST RESULTS

Test Item	Specification	Test Result
Appearance	White or off-white crystalline powder	Conforms
Assay (HPLC, wt%)	≥ 99.0%	99.47%
Purity (HPLC, % area)	≥ 99.0%	99.8%
pH (10 mg/mL solution)	2.0 – 5.0	3.24
Water Content	≤ 8.0%	3.29%
Residual Ethanol (by GC)	≤ 1.0%	0.01%

## HEAVY METALS ANALYSIS

Test Item	Specification	Test Result
Heavy Metals (Total)	< 10 ppm	Conforms
Arsenic (As)	Negative (Not Detected)	Not Detected
Lead (Pb)	Negative (Not Detected)	Not Detected
Cadmium (Cd)	Negative (Not Detected)	Not Detected
Mercury (Hg)	Negative (Not Detected)	Not Detected

## MICROBIOLOGICAL TESTING

Test Item	Specification	Test Result
Total Aerobic Microbial Count	≤ 1,000 CFU/g	Conforms
Yeasts & Molds (PDA Method)	< 100 CFU/g	Conforms
Coliforms (BGLB Method)	Negative (Not Detected)	Not Detected
<i>Staphylococcus aureus</i>	Negative (Not Detected)	Not Detected

<i>Pseudomonas aeruginosa</i>	Negative (Not Detected)	Not Detected
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**CONCLUSION: QUALIFIED (All specifications met)**

**STORAGE CONDITIONS**

Store in a tightly sealed container in a cool, dry place. Short-term storage: room temperature (up to 2 months). Long-term storage: 2–8°C (up to 2 years).