

Certificate of Analysis

Product	NAD* (β -Nicotinamide Adenine Dinucleotide)	CAS No.	53-84-9
Product No.	NAD	Molecular Formula	C ₂₁ H ₂₇ N ₇ O ₄ P ₂
Sequence	---		
Batch No.	NAD-26051201	Quantity	1275.0g
Mfg. Date	March .13 th , 2026	Retest Date	March .12 th , 2028
【ITEMS】		【SPECIFICATIONS】	【RESULTS】
Appearance		White or off-white crystalline powder	White crystalline powder
Solubility		Freely soluble in water, slightly soluble in ethanol	Conforms
Solution clarity and color		Clear and colorless liquid (C=10mg/ml)	Conforms
Identificat ion	HPLC	The retention time of the principal peak of the test solution corresponds to that of the reference solution, as obtained in the Assay.	Conforms
UV spectrum	λ max=259nm, A250/A260=0.80 ~0.90, A280/A260=0.20 ~0.30	Conforms	
Related substances (HPLC)		Largest peak Detected:NMT 0.5%Total Peaks Detected:NMT 2.0%	0.14%0.71%
Purity(HPLC)		NLT 98.0%	99.30%
pH		2.0~4.0 (1% aqueous solution)	3.1
Acid group ions		Trifluoroacetate ion NMT 0.5%Acetate ion NMT 0.5%	N. DN. D
Water		NMT 10.0%	4.20%



content (KF)			
Heavy metals		NMT 10ppm	Conforms
Residual solvent		Methylene chloride NMT 600ppm Acetonitrile NMT 410ppm Methyl tert-butyl ether NMT 5000 ppm DMF NMT 880ppm	N. D 55ppm N. DN. D
Bacterial endotoxins		NMT 5EU/mg	<3EU/mg
Microbial Limits		Total aerobic bacteria $\leq$ 100cfu/g Mould & Yeast $\leq$ 10cfu/g Bile tolerant enterobacteria: absence in 1g Pseudomonas aeruginosa: absence in 1g Staphylococcus aureus: absence in 1g	Conforms Conforms absent absent absent
Assay		95.0%~105.0% (Calculated on anhydrous basis)	99.10%
Storage		Keep in tight container, protect from light & moisture, store at a temperature of $-20 \pm 5^{\circ}$ C.	
Report	Li Peng	Date	2026. 3. 13
Reviewer	Peng Hailun	Date	2026. 3. 13

Conclusion: This batch of product complies with Enterprise Standard.
It is only supplied as chemical product. It is only for R&D use.

