



CERTIFICATE OF ANALYSIS

The Power to Question

Catalog Number: sc-214453A
Lot Number: SAMPLE
Product Name: α -Nicotinamide adenine dinucleotide
CAS Number: 7298-93-3
Molecular Formula: $C_{21}H_{26}N_7NaO_{14}P_2$
Molecular Weight: 685.41
Native Source: *Saccharomyces cerevisiae*

Test	Specification	Result
Appearance	White to faint yellow powder	Off-white powder
Purity (HPLC)	$\geq 95\%$	99%
Solubility	Clear colorless to faint yellow at 50 mg/ml in water	Clear very faint yellow solution
Solvent Content (GC)	$\leq 5\%$	3.1% ethanol < 0.04% methanol
Extinction Coefficient	EmM: 16.3 - 17.1 at λ_{max} of 259 nm -261 nm in 0.1 M Phosphate, pH 7.0	16.5 at λ_{max} of 259 nm at pH 7.0
Impurity	β -isomer impurity: $\leq 1\%$ (by HPLC)	0.1% β -NAD (dry basis)
Phosphorus (ICP)	8.7 - 10.0%	9.1%
Water Content (KF)	$\leq 7\%$	2.1%

Satisfaction Guarantee: We appreciate your business and are committed to providing the highest level of quality and service. Any product that does not meet the performance standards indicated in our product literature will be replaced at no charge. Our policy is valid for one year from the date of your purchase.

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