



OKINAWA CHOSEI HERB CORP

116-1Nakaiho-Aza, Sashiki, Nanjyou-City Okinawa, Japan

Certificate of Analysis

Product and Batch Information

Product Name	Beta-Nicotinamide Mononucleotide (NMN)		
Version	A: High bulk density (0.3-0.5g/ml) for tablet, capsule form		
Molecular Weight	334.219g/mol	CAS#	1094-61-7
Country of Origin	JAPAN	Formula	C11H15N2O8P

ITEM	SPECIFICATION	TEST METHOD
Active Ingredient		
Assay(% on dry basis)	99.0%~102.0%	HPLC
Purity	NLT 99.0%	HPLC
Physical Control		
Identification	1H NMR spectra correspond to reference standard	1H NMR
	13C NMR spectra correspond to reference standard	13C NMR
	LC-MS retention time and m/z correspond to reference standard	LC-MS
Appearance	White to off-white crystalline powder	Visual
Odor & taste	Characteristic	Organoleptic
Appearance of solution	5%w/v in water: Colorless to pale yellow and clear	Organoleptic
Sodium Content	NMT 1.0%	USP-NF-2022
Water Content	NMT 1.0%	Karl Fischer
PH(1.0g/100mL(25°C))	3.0-4.5	ChP
Residue Solvents	Ethanol:NMT 500µm	USP-NF-2022
Chemical Control		
Arsenic(As)	NMT 0.5ppm	ICP-MS
Cadmium (Cd)	NMT 0.5ppm	ICP-MS
Lead (Pb)	NMT 0.5ppm	ICP-MS
Mercury (Hg)	NMT 0.1ppm	ICP-MS
Microbiological Control		
Total Plate Count	NMT 1,000 cfu/g	USP-NF-2022
Yeast & Mold	NMT 100 cfu/g	USP-NF-2022
Salmonella	Negative	USP-NF-2022
E.Coli	Negative	USP-NF-2022
Staphylococcus Aureus	Negative	USP-NF-2022
Pseudomonas aeruginosa	Negative	USP-NF-2022
Bile-tolerant Gram-Negative Bacteria	Negative	USP-NF-2022
Candida albicans	Negative	USP-NF-2022
Clostridia	Negative	USP-NF-2022
Coliforms	NMT 0.92MPN/g	GB4789.3
Packing and Storage		
Packing	Pack in paper-Catron and two plastic-bags inside.	
Storage	Store in a well-closed container away from moisture and direct sunlight.	
Shelf Life	2 years if sealed and stored properly.	

