

Certificate of Analysis

Product and Batch Information			
Brand Name	UTHEVER®		
Product Name	Beta-Nicotinamide Mononucleotide (NMN)		
Version	B: Low bulk density (0.15-0.25g/ml) only for powder form		
Batch No.	NMN201008	CAS#	1094-61-7
Manufacture Date	Oct. 15th, 2020	Expiry Date	Oct. 14th, 2022
Country of Origin	P.R. China	Reference	EFFE 18
Item	Specification	Result	Test Method
Active Ingredient			
Assay(% on dry basis)	99.0% ~102.0%	99.21%	HPLC
Purity	NLT 99%	99.30%	HPLC
Physical Control			
Identification	1H NMR spectra correspond to reference standard	Conforms	1H NMR
	13C NMR spectra correspond to reference standard	Conforms	13C NMR
	LC-MS retention time and m/z correspond to reference standard	Conforms	LC-MS
Appearance	White to off-white crystalline powder	Conforms	Visual
Odor & taste	Characteristic	Conforms	Organoleptic
Appearance of solution	5%w/v in water: Colorless to pale yellow and clear	Conforms	Organoleptic
Water Content	NMT 1.0%	0.21%	Karl Fischer
PH(1.0g/100mL(25 °C))	3.0-4.5	3.65	CP<0631>
Bulk Density	0.15-0.25g/ml	0.24g/ml	USP<616>
Chemical Control			
Heavy Metals	NMT 10ppm	Conforms	USP<231>
Arsenic (As)	NMT 1.0ppm	Conforms	ICP-MS
Cadmium (Cd)	NMT 1.0ppm	Conforms	ICP-MS
Lead (Pb)	NMT 1.0ppm	Conforms	ICP-MS
Mercury (Hg)	NMT 0.5ppm	Conforms	ICP-MS
Microbiological Control			
Total Plate Count	NMT 1,000cfu/g	<10 cfu/g	USP 42
Yeast & Mold	NMT 1,00cfu/g	<10 cfu/g	USP 42
Salmonella	Negative	Negative	USP 42
E.Coli	Negative	Negative	USP 42
Staphylococcus Aureus	Negative	Negative	USP 42
Pseudomonas aeruginosa	Negative	Negative	USP 42
Bile-tolerant Gram-Negative Bacteria	Negative	Negative	USP 42
Candida albicans	Negative	Negative	USP 42
Clostridia	Negative	Negative	USP 42
Packing and Storage			
Packing	Pack in paper-Carton 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.		

