

## Certificate of Analysis

Product and Batch Information			
Brand Name	Uthever™		
Product Name	Beta-Nicotinamide Mononucleotide (NMN)		
Version	B: Low bulk density (NLT 0.15-0.25g/ml) only for powder form		
Batch No.	EF200504-3	CAS#	1094-61-7
Manufacture Date	May. 4th, 2020	Expiry Date	May. 3th, 2022
Country of Origin	P.R. China	Reference	EFFE 18
Item	Specification	Result	Test Method
<b>Active Ingredient</b>			
Purity	NLT 98%	99.51%	HPLC
<b>Physical Control</b>			
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%	0.19%	Karl Fischer
PH(1.0g/100mL(25°C))	3.0-4.5	3.67	CP<0631>
Bulk Density	NLT 0.15-0.25g/ml	0.23g/ml	USP<616>
<b>Chemical Control</b>			
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
<b>Microbiological Control</b>			
Total Plate Count	NMT 1,000cfu/g	<10 cfu/g	USP 40
Yeast & Mold	NMT 1,00cfu/g	<10 cfu/g	USP 40
Salmonella	Negative	Negative	USP 40
E.Coli	Negative	Negative	USP 40
Staphylococcus Aureus	Negative	Negative	USP 40
Pseudomonas aeruginosa	Negative	Negative	USP 40
Bile-tolerant Gram-Negative Bacteria	Negative	Negative	USP 40
Candida albicans	Negative	Negative	USP 40
Clostridia	Negative	Negative	USP 40
<b>Packing and Storage</b>			
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.		

