

## PRODUCTION BATCH REPORT: NICOTINAMIDE MONONUCLEOTIDE

<b>CAS No.:</b>	1094-61-7	<b>Country of Origin:</b>	Netherlands
<b>Molecular Formula:</b>	C <sub>11</sub> H <sub>15</sub> N <sub>2</sub> O <sub>8</sub> P	<b>Batch No.:</b>	cs-nmn-20233649
<b>Molecular Weight:</b>	334.22	<b>Manufacture Date:</b>	2023-09-23
<b>ITEM</b>	<b>SPECIFICATION</b>	<b>RESULT</b>	<b>TEST METHOD</b>
<b>Purity, %:</b>	98.0	99.8	HPLC
<b>Physical Control</b>			
<b>Appearance</b>	Fine Powder	Complies	Visual
<b>Color</b>	White	Complies	Visual
<b>Identification</b>	Positive	Complies	NMR
<b>pH</b>	2.0-4.0	3.8	CPh
<b>Water</b>	NMT 6.0 %	0.03 %	K.F.
<b>Chemical Control</b>			
<b>Heavy metals</b>	NMT 10 PPM	Conforms	Atomic Absorption
<b>Arsenic (As)</b>	NMT 1 PPM	0.001 ppm	Atomic Absorption
<b>Mercury (Hg)</b>	NMT 2 ppm	Not detected	Atomic Absorption
<b>Cadmium (Cd)</b>	NMT 2 ppm	Not detected	Atomic Absorption
<b>Lead (Pb)</b>	NMT 1 ppm	0.003 ppm	Atomic Absorption
<b>Solvents Residue</b>	Meeting USP Standard	44 ppm	Gas Chromatography
<b>Microbiological Control</b>			
<b>Total Plate Count</b>	10 000 cfu/g Max	<10 cfu/g	AOAC
<b>Yest &amp; Mold</b>	300 cfu/g Max	<10 cfu/g	AOAC
<b>E.Coli</b>	Negative/10g	Negative	AOAC
<b>Salmonella</b>	Negative/25g	Negative	AOAC
<b>Staph Aureus</b>	Negative/10g	Negative	AOAC
<b>Packaging and Storage</b>			
<b>Packing</b>	According to the buyers' specifications		
<b>Storage</b>	Store in a well-closed container, recommended temperature: 2-8 °C		
<b>Shelf life</b>	2 years if sealed and stored properly.		
<b>Other information</b>			
<b>Factory</b>	Borealis manufacturing		
<b>Quality assurance</b>	ISO 22000:2018 Food Safety Management Systems Development, manufacturing, packaging and wholesale of pharmaceutical products, food supplements and medical products.		
<b>Certificate number</b>	GKLT-0169-FC, issued by GCERTI		