

CERTIFICATE OF ANALYSIS

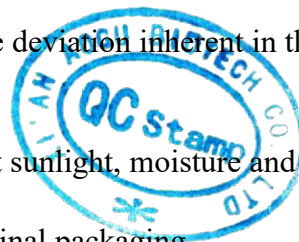
Product Name:	Vitamin B3 (Niacinamide) PC		
INCI Name:	Niacinamide		
CAS Number:	98-92-0		
Batch Number	20221025	Manufacture Date	20221025
Expiration Date:	36 months from production date		

Property	Specification	Analysis
Appearance	Crystalline powder	Pass
Color	White	Pass
Assay	99.0-101.0% w/w	99.6% w/w
Related Substances - 3-Cyanodiridine	0.10% w/w MAX	0.02% w/w
Related Substances - Any Unknown Impurity	0.10% w/w MAX	0.02% w/w
Related Substances - Total of Impurities	0.2% w/w MAX	0.0% w/w
Nicotinic Acid	100 ppm MAX	76 ppm
pH of Solution	6.0-7.5	7.2
Clarity of Solution	3.00 NTU MAX	0.68 NTU
Color Values (CIELAB) L*	90.0-101.0	98.2
Color Values (CIELAB) a*	-10.0 to 10.0	0.0
Color Values (CIELAB) b*	-10.0 to 10.0	1.0
Color of Solution (calc./BY)	7 MIN	7
Melting Range Start Point	128-131°C	129°C
Melting Range End Point	128-131°C	130°C
Particle Size Fraction - 50 µm Sieve	90% w/w MIN	100% w/w
Particle Size Fraction – 250 µm Sieve	8% w/w MAX	<1% w/w

Property	Specification	Analysis
Sulphated Ash	0.10% w/w MAX	0.02% w/w
Heavy Metals	10 ppm MAX	<10 ppm
Chloride	70 mg/kg MAX	<70 mg/kg
Sulfate	190 mg/kg MAX	<190 mg/kg
Readily Carbonizable Substances	Passes test	Pass
Identification – UV	0.63-0.67	Pass
Identification – IR	Passes test	Pass
Loss on Drying	0.5% w/w MAX	0.0% w/w
Lead	1 ppm MAX	Pass
Total Aerobic Microbial Count	100 CFU/g MAX	Pass

Total Combined Yeast & Mold	100 CFU/g MAX	Pass
E. coli	Negative in 1g	Pass
Staphylococcus aureus	Negative in 1g	Pass
Pseudomonas aeruginosa	Negative in 1g	Pass
Candida albicans	Negative in 1g	Pass

The above data were obtained using the test indicated and is subject to the deviation inherent in the test method. Results may vary under other test methods or conditions.



Storage: Store in tight, light-resistant containers, avoid exposure to direct sunlight, moisture and excessive heat.

Shelf Life: 36 months if store under the conditions above and stay in original packaging.

