



Certificate of Analysis

Product Name:	Melatonin	Batch Number:	Varies
CAS No.	73-31-4	Manufacture Date:	Varies
Molecular Formula:	C ₁₃ H ₁₆ N ₂ O ₂	Expiry Date:	Varies

IDENTIFICATION		SPECIFICATION	RESULT
Assay (HPLC)		98.5 ~ 101.5%	99.5 - 99.71%
Physical	Appearance	White to off-white crystalline powder	Complies
	Solubility	Soluble in acetone, ethyl acetate and methanol, slightly soluble in water	Complies
	Melting point	116.0 - 120.0°C	117.6 - 119.0°C
	Loss on drying	≤ 1%	0.08 - 0.1%
	Residue on ignition	≤ 0.1%	0.03 - 0.04%
	Particle Size	≥ 98% pass 80 mesh	Complies
	Related compounds	Individual impurity ≤ 0.1%	0.029 - 0.07%
		Total impurity ≤ 1.0%	0.11 - 0.23%
Chemical	Lead (Pb)	≤ 1 ppm	Complies
	Arsenic (As)	≤ 1 ppm	Complies
	Cadmium (Cd)	≤ 0.5 - 1 ppm	Complies
	Mercury (Hg)	≤ 0.1 ppm	Complies
	Chloride and Sulfate	≤ 0.02%	< 0.02%
Microbial	Total Plate Count	≤ 1000 cfu/g	Complies
	Yeast & Mold	≤ 100 cfu/g	Complies
	E. coli, Salmonella, Staphylococcus	Negative	Complies
Else	Storage condition	Sealed, kept in shady and dry place	
	Shelf life	Three years	

