

CERTIFICATE OF ANALYSIS

Product name	Aniracetam	Batchnumber	HS180927
Quantity	12.0Kg	Manufacture date	Sept 27, 2019
Test reference	CP 2015	Expire date	Sept 26, 2021

Items	Specifications	Results
Appearance	White or white-off crystalline powder;odorless and a little bitter	White crystalline powder; odorless and a little bitter
Melting point	118°C~122°C	120.1°C~ 121.9°C
Absorption coefficient	476 ~ 506	492
Chemical reaction	Generate white precipitate	Generate white precipitate
IR identification	Should comply with the reference spectrum	Comply with the reference spectrum
Related substance	Individual impurity \leq 0.2%	0.1%
	Total impurities \leq 1.0%	0.2%
Residual solvent	Methanol \leq 0.3%	0.0
	Ethanol \leq 0.5%	0.0
	Ethyl acetate \leq 0.5%	Negative
	Toluene \leq 0.089%	Negative
Loss on drying	\leq 0.5%	0.1%
Residual on ignition	\leq 0.1%	0.05%
Heavy metal	\leq 10 ppm	Complies
Content of C ₁₂ H ₁₃ NO ₃	98.0% ~ 102.0%	101.0%
Bacterial count	\leq 1000(cfu/g)	<10(cfu/g)
Mould and yeast count	\leq 100(cfu/g)	<10(cfu/g)
Escherichia coli	Not detected/g	Negative/g
Bacterial count	\leq 1000cfu/g	<10cfu/g