

## CERTIFICATE OF ANALYSIS

Product Name	CreatineMonohydrate	BatchNumber	GA35-Y-250601
CAS No.	6020-87-7	MeshSize	200mesh
Reference Standard	CurrentUSP	BatchSize	1000kg
Molecular Formula	C4H9N3O2.H2O	ManufacturingDate	Jun.05,2025
Molecular Weight	149.15	Re-TestDate	Jun.04,2027
Storage Condition:	Preserve in tight, light-resistant containers.		

No.	TEST ITEM		SPECIFICATION	RESULT
1	Description		White powder.	White powder
2	Identification	ByIR	Test infrared spectrum of the sample should concordant with the infrared spectrum of the Creatine reference standard obtained in same manner.	Conform
		By HPLC	The retention time of the major peak in the Sample solution corresponds to that of the Standard solution, as obtained in the Assay.	Conform
3	Solubility		Slightly soluble in water ; insoluble in alcohol, in ether.	Conform
4	Loss on drying		10.5% - 12.5%	11.0%
5	Residue on ignition		NMT 0.1%	0.1%
6	Chloride and Sulfate		NMT 0.1%	Conform
7	Bulk Density		True value	441g/L
8	Tapped Bulk Density		True value	833g/L
9	Related impurities	Dicyandiamide	NMT 0.01%	0.0002%
		Dihydrotriazine	NMT 0.0005%	Not Detected
		Creatinine	NMT 0.01%	0.0044%
		Any unspecified impurity	NMT 0.10%	0.01%
		Total unspecified impurities	NMT 1.5%	0.01%
		Total impurities	NMT 2.0%	0.01%
10			≤ 1000cfu/g	Conform

	Microbiological limit test	Total aerobic microbial count		
		Total molds and yeasts	≤100cfu/g	Conform
		<i>Escherichia coli</i>	Absent	Conform
		<i>Salmonella species</i>	Absent	Conform
		<i>Staphylococcus aureus</i>	Absent	Conform
11	Assay		C <sub>4</sub> H <sub>9</sub> N <sub>3</sub> O <sub>2</sub> .H <sub>2</sub> O 98.0%~102.0% 98.0% ~102.0% of CHNO.HO <sub>2</sub> <sup>4932</sup> calculated on the dried basis.	99.8%
Conclusion		USP - All items meet the USP.		

Tested by: Tiantian Wang

Checked by: Yuanmeng Geng

Approved by: Yulian Liu

