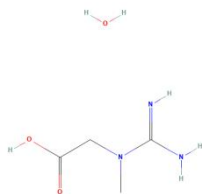




Technical Data Sheet

Tianjin Jincheng Biotechnology Co., Ltd.

Product Name: Creatine Monohydrate
Chemical Structure:



Molecular Formula: C₄H₁₁N₃O₃
Molecular Weight: 149.15
CAS No.: 6020-87-7

Specifications

Item	Limit	Analysis method
Description	White powder, no odor, no visible foreign matter	Visual
Identification	Conforms to the reference (IR and HPLC)	USP <197M> / HPLC
Cyanide	Not more than 1 ppm	Colorimetric method
Sulfate	Not more than 0.03%	USP <221>
Loss on drying	10.5% - 12.0%	USP <731>
Residue on ignition	Not more than 0.1%	USP <281>
Heavy metals (as Pb)	Not more than 10 ppm	USP <231>
Purity (HPLC)	Not less than 99.5%	HPLC
Dicyandiamide	Not more than 0.005%	HPLC
Creatinine / Dihydrotriazine	NMT 0.01% / 0.0005%	HPLC
Other impurities (single/total)	NMT 0.1% / 1.5%	HPLC
Total impurities	Not more than 2.0%	HPLC
Assay (HPLC)	99.5% - 102.0%	HPLC
Lead / Arsenic	NMT 0.1 / 0.5 ppm	ICP-MS
Mercury / Cadmium	NMT 0.01 / 1 ppm	ICP-MS
Bulk density	NLT 600 g/L (80 mesh) / 400 g/L (200 mesh)	Density meter
Tapped density	NLT 720 g/L (80 mesh) / 550 g/L (200 mesh)	Density meter
Particle size	Not less than 70% through 200 mesh	Sieve analysis
Sulfuric acid test	Not carbonized	Visual
Aerobic / Moulds & yeasts	Not more than 100 cfu/g each	USP <61>
E. coli / Salmonella / S. aureus	Not detected	USP <62>

Recommended shelf life: 3 years

External packing: Fibre drum, 25 kg net

Inner packing: Double-layer PE bag

Storage: Preserve in tight containers, protected from light, in a cool and dry place.

Note: Analytical methods refer to current USP general chapters and the manufacturer’s standard (QS-01-F07(1)-01); this document is for reference only and the quality of each batch is subject to the COA supplied with the goods.

Preparation Date: Sep. 21, 2026 | Version: 1.0 | Prepared by: | Product code: JC-CM-001