



TECHNICAL DATA SHEET

Product Name: Creatine Monohydrate

CAS No.: 6020-87-7

Molecular Formula: $C_4H_9N_3O_2 \cdot H_2O$

Molecular Weight: 149.15 g/mol

1. Product Description

Creatine Monohydrate is a white crystalline powder, widely used in food, nutraceutical, and sports nutrition applications. It provides a highly pure and stable source of creatine, supporting energy metabolism, muscle strength, and physical performance.

2. Typical Specification

Parameter		Specification
Appearance		White crystalline powder
Assay	≥ %	99.5
Creatinine	≤ppm	100
Dicyandiamide	≤ppm	50
Cyanide	≤ppm	1
Loss on Drying	≤%	12.0
Residue on Ignition	≤%	0.1
Sulfate	≤%	0.03
Heavy Metals	≤ppm	5
Arsenic(As)	≤ppm	1
Lead(Pb)	≤ppm	3
Mercury(Hg)	≤ppm	0.1
Cadmium(Cd)	≤ppm	1
Bulk Density	≥g/L	420
Tapped Density	≥g/L	550
Total Bacterial Count	≤ CFU/g	100
Mold & Yeast	≤ CFU/g	100

E.Coli	Negative
Salmonella	Negative
Staphylococcus Aureu	Negative
Mesh	200

3. Packaging

- Standard: 25 kg fiber drum or kraft paper bag with inner PE liner
- Customized packaging available upon request

4. Applications

- Sports Nutrition: Enhances strength, endurance, and recovery
- Dietary Supplements: Capsules, tablets, powder blends
- Functional Foods & Beverages
- Pharmaceutical formulations

5. Storage & Handling

Store in a cool, dry, and well-ventilated area

Avoid contact with moisture and direct sunlight

Keep the packaging tightly closed when not in use

6. Shelf Life

24 months from the date of manufacture under recommended storage conditions

8. Safety Information

- Non-hazardous under normal conditions of use
- Avoid inhalation of dust and contact with eyes
- Use appropriate personal protective equipment (PPE) when handling

bulk material