

**PRODUCT TECHNICAL DOSSIER**

**CREATINE MONOHYDRATE 200 MESH**

**Product Code:**

P34259

**Raw Material Full Name:**

Creatine Monohydrate

**This material is Food Grade:**

Yes

**Food Grade Packaging:**

Yes

**Vegan / Vegetarian Status:**

Suitable for Both

**Limit/Range/Specification:**

Min 99.5% by HPLC

**CAS Number:**

6020-87-7

**EC/EINECS Number:**

200-306-6

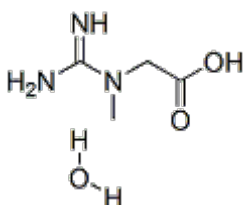
**Molecular Formula for the raw material:**

$C_4H_9N_3O_2H_2O$

**Average Molecular weight:**

149.14

**Molecular structure**



**Solubility in Water:**

1.0 ~ 1.2g/100ml water

**Particle Size:**

200 Mesh

**Percentage passed through:**

Min 95%

**Bulk Density:**

400 ~ 550 g/l

**Tapped Density:**

500 ~ 650 g/l

**Loss on Drying:**

Max 12%

**Residue on Ignition:**

Max 0.1%

**Country of Origin:**

China

**Country of Origin of the Manufacture:**

China

**Base Source/Start Material:**

Sodium Sarcosinate and Cyanamide

**Origin of Product – Synthetic, Plant, Mineral, Animal, Fish or Fermented:**

Synthetic - Hydroxy Acetonitrile and Methylamine

**Compound Ingredients Origin, Function and Percentages:**

None

**Shelf Life from Date of Manufacture:**

Min 2 Years

**Storage Conditions:**

This material is to be stored in a tightly sealed bag/container and to be kept in a cool place away from moisture and direct sunlight.



**Appearance (Fine/Crystals/Crystalline/Hygroscopic):**

Fine Powder

**Colour:**

White

**Flavour/Taste:**

Characteristic

**Odour:**

Characteristic

**Do any of the parameters change in different seasons?**

No

**Microbiological Test**

**Total Viable Count:**

Max 10,000 cfu/g

**Yeast & Moulds:**

Max 100 cfu/g

**E. coli:**

Negative/1g

**Salmonella:**

Negative/25g

**Heavy Metals**

**Lead (Pb):**

Max 3ppm

**Cadmium (Cd):**

Max 1ppm

**Mercury (Hg):**

Max 0.1ppm

**Arsenic (As):**

Max 1ppm



**Pharmacopeia Standard Used:**

USP & French Arrêté 26 September 2016 list of substances authorised in food supplements

**There are no nuts in this recipe; however, we cannot guarantee that the raw materials entering the site are nut free.**

**Please note that surveillance testing may mean that not all the parameters stated on this specification are tested for every batch.**

ALLERGENS	Product Contains YES/NO	Listed Item on Site at Manufacturer YES/NO	If YES, Please Comment
Peanuts and Peanut Derivatives (including possible cross contamination)	No	No	
Other Nut and Nut Derivatives <i>Almond (Amygdalus communis L.), Hazelnut (Corylus avellana), Walnut (Juglans regia), Cashew (Anacardium occidentale), Pecan nut (Carya illinoensis (Wangenh.) K. Koch), Brazil nut (Bertholletia excelsa), Pistachio nut (Pistacia vera), Macadamia nut and Queensland nut (Macadamia ternifolia)</i>	No	No	
Sesame Seeds and Sesame Seed Derivatives	No	No	
Other Seeds and Seed Derivatives (Poppy Seeds, Cotton Seeds, Sunflower Seeds)	No	No	
Milk and Milk Derivatives (including lactose)	No	No	
Egg and Egg Derivatives	No	No	
Cereals and Derivatives containing OR POTENTIALLY CONTAMINATED WITH Gluten <i>(wheat, wheatgrass, faro, freekeh, spelt, kamut, rye, oats, barley, barley grass)</i>	No	No	
Soya and Soya Derivatives	No	No	
Lupin and Lupin Derivatives	No	No	
Mustard and Mustard Derivatives	No	No	
Celery or Celery Derivatives (including Celeriac)	No	No	
Fish and Fish Derivatives	No	No	
Molluscs and their Derivatives	No	No	
Crustaceans and their Derivatives	No	No	
Sulphur Dioxide and Sulphites (E220, E228) at levels > 10mg/kg or 10mg/litre	No	No	



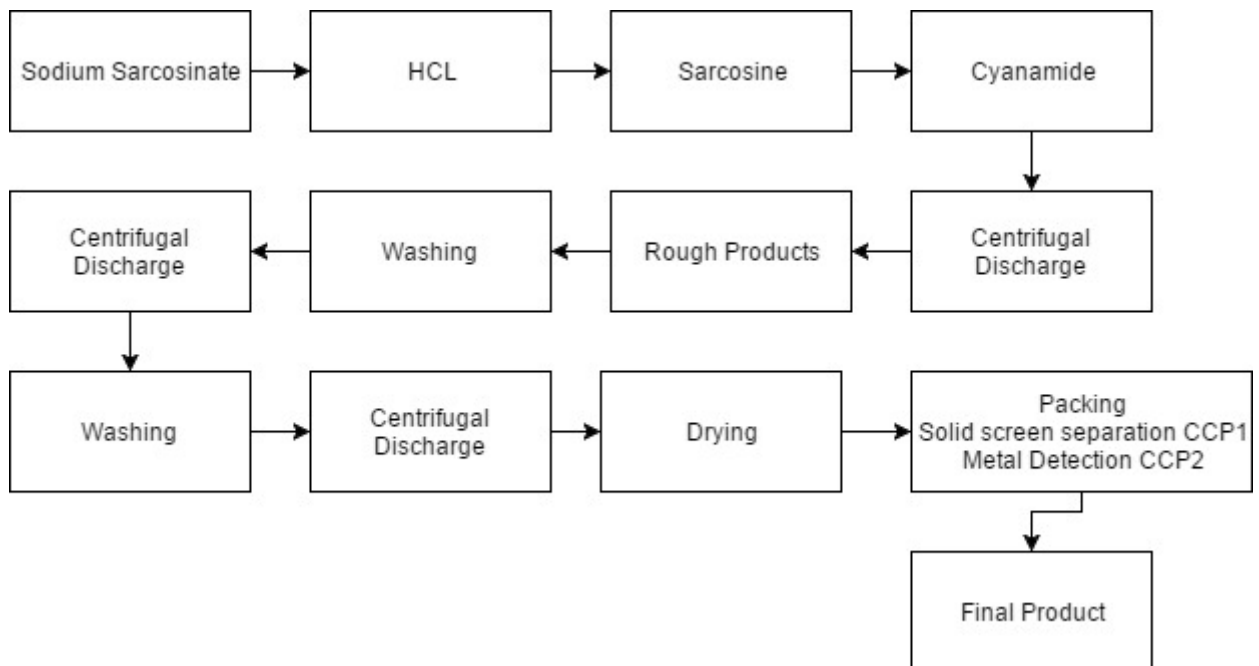
ADDITIVES / CONTAMINANTS / DIETARY REQUIREMENTS	Product Contains YES/NO	Listed Item on Site at Manufacturer YES/NO	If YES, Please Comment
Additives	No	No	
Antioxidants	No	No	
Ethylene Oxide	No	No	
Gelatine	No	No	
Flavourings (Artificial / Nature Identical / Natural / Smoked)	No	No	
Maize / Corn and any Derivatives	No	No	
Legumes / Pulses	No	No	
Rice and Rice Derivatives	No	No	
Added Salt	No	No	
Added Sugar / artificial or natural sweeteners	No	No	
Aspartame	No	No	
BHA / BHT (E320 / E321)	No	No	
Caffeine	No	No	
Colours (Artificial / Nature Identical / Natural / Smoked)	No	No	
Dextrose	No	No	
Dioxins	No	No	
MSG (Added and Naturally Occurring E621) or Glutamates (E620 to E625)	No	No	
Nucleotides (E627, E630, E631, E635)	No	No	
Polyols (sugar alcohols)	No	No	
Benzoates (E210 / E219)	No	No	
Sorbic Acid (E200, E203)	No	No	
Any other Preservatives	No	No	
Ethanol	No	No	
Honey	No	No	
Lactose	No	No	
Yeast and Yeast Derivatives	No	No	
All Animal Products (Beef, Pork, Poultry or other) and Derivatives (which may include growth/yield hormones, antibiotics etc.)	No	No	
Bovine Products or Derivatives (which may include growth/yield hormones, antibiotics etc.)	No	No	



### NUTRITIONAL DATA

Test	Calculated Value per 100gm
Energy KJ / Kcal	0 KJ / 0 Kcal
Fat	0
- Of which saturates	0
Carbohydrate	0
- Of which sugars	0
Fibre	0
Protein	0
Salt	0

### PRODUCTION FLOW CHART



### **CONFIRMATION OF BSE/TSE STATUS**

This is to certify that this product complies with all relevant current UK and EU Legislative requirements in regard to Transmissible Spongiform Encephalopathies (TSE) and Bovine Spongiform Encephalopathy (BSE) for human food, and so is free of TSE/BSE.

This is also to certify that, during the course of their manufacture, the above-mentioned product did not come into contact with any materials, which could be derived from TSE/BSE risk materials.

### **CONFIRMATION OF GM STATUS**

This is to certify that this product is not manufactured from GM raw materials and is therefore not subject to labelling under regulations 1829/2003/EC and 1830/2003/EC.

### **CONFIRMATION OF NON IRRADIATION STATUS**

This is to certify that this product, whole or in part, has not been subjected to Ionising Radiation as per European Directives 1999/3/EC.

### **CONFIRMATION OF NANDROLONE STATUS**

This is to certify that this product, whole or in part, has not come into contact with Nandrolone or any of its precursors in any way.

### **CONFIRMATION OF IOC PRODUCT STATUS**

This is to certify that this product, whole or in part, has not come into contact with any product/s, which is banned by the IOC (International Olympics Committee) and or WADA.

### **CONFIRMATION OF ANIMAL TESTING STATUS**

This is to certify that all the products sold by Cambridge Commodities have not been tested on animals in any part of its manufacture in accordance with regulation 86/609/EEC.

### **CONFIRMATION OF PESTICIDES STATUS**

This is to certify that the above-mentioned product complies with the regulation (EC) No.396/2005 of 23rd February 2005 and commission Regulation (EU) No. 559/2011 of 7th June 2011 amending annexes II and III of the above Regulation.

### **CONFIRMATION OF NANOPARTICLE STATUS**

This is to certify that unless otherwise stated, the above-mentioned product is free of nanoparticles. Commission Recommendation 2011/696/EU, defines as follows: "'Nanomaterial' means a natural, incidental or manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for 50 % or more of the particles in the number size distribution, one or more external dimensions is in the size range 1 nm - 100 nm".



## MATERIAL SAFETY DATA SHEET

### Section 1 Identification of the Substance/Mixture and of the Company/Undertaking

Product name: Creatine Monohydrate  
Chemical formula:  $C_4H_9N_3O_2H_2O$   
Company: Cambridge Commodities Limited  
Lancaster Way, Ely, Cambridgeshire, CB6 3NX  
Tel: 01353 667258. Email: qa@c-c-l.com

### Section 2 Hazards Identification

Labelling according to Regulation (EC) No  
1272/2008[CLP/GHS] Product identifier:  
Hazard pictograms



Signal word: Warning

Hazard statement(s)

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ eye protection/ face protection.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P321 Specific treatment (see supplemental first aid instructions on this label).

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant

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Adverse physicochemical effects: 0  
Adverse human health effects and symptoms: 2  
Environmental effects: 0  
Other adverse hazards:  
Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.  
Skin: May be harmful if absorbed through skin. Causes skin irritation.  
Eyes: Causes eye irritation.  
Ingestion: May be harmful if swallowed.

### Section 3 Composition/Information on Ingredients

EC No: 200-306-6  
CAS No: 6020-87-7  
Purity: <=100%  
Hazard impurities: Creatinine  
Description of the mixture: Single ingredient.  
Hazardous ingredients No hazardous ingredient.

### Section 4 Emergency and First Aid Measures

General information: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.  
If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.  
In case of skin contact: Wash off with soap and plenty of water. Consult a physician.  
In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.  
If swallowed  
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### Section 5 Fire-fighting measures

Extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.  
Advice for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary.

### Section 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures  
For non-emergency personnel: Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.  
For emergency responders: Wear self-contained breathing apparatus for firefighting if necessary.  
Environmental precautions: Do not let product enter drains.  
Methods and material for containment and cleaning up  
For containment: Pick up and arrange disposal without creating dust.  
For cleaning up: Sweep up and shovel. Keep in suitable, closed containers for disposal.

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## Section 7 Handling and Storage

Protective measures: Avoid contact with skin and eyes. Avoid formation of dust and aerosols.  
Advice on general occupational hygiene: Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.  
Technical measures and storage conditions: Keep container tightly closed in dry packaging materials.  
Requirements for storage rooms and vessels: well-ventilated room.  
Storage class: Materials

## Section 8 Exposure Controls/Personal Protection

Occupational exposure limits: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).  
Appropriate engineering controls: Use mechanical exhaust or laboratory fume hood to avoid exposure.  
Eye / Face protection: Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).  
Skin protection: impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.  
Respiratory protection: For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## Section 9 Physical and Chemical Properties

Appearance: White crystalline, characteristic smell.  
Melting point/range: 292 °C (558 °F)

## Section 10 Stability and Reactivity

Chemical stability: Stable under recommended storage conditions.  
Incompatible materials: Strong oxidizing agents.  
10.6 Hazardous decomposition products: Hazardous decomposition products formed under fire conditions.  
- Carbon oxides, nitrogen oxides (NO<sub>x</sub>).



## Section 11 Toxicological Information

### Acute toxicity

Practical experience/human Oral LD50: Musculoskeletal: Other changes.

Animal data Oral LD50: TDL<sub>o</sub> Oral - rat - 1,535 mg/kg

### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

### Mixtures

(a) Acute toxicity; none

(b) Irritation: none

(c) Sensitisation: none

(d) Repeated dose toxicity; none

(e) Carcinogenicity: none

(f) Mutagenicity: none

(g) toxicity for reproduction: none

### Other information

RTECS: MB7706000

## Section 12 Ecological Information

No Data Available

## Section 13 Disposal Considerations

### Product / Packaging disposal:

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Packaging: Dispose of as unused product.

## Section 14 Transport Information

UN Proper shipping name: Not applicable

14.3 Transport hazard class (es)/Hazard label(s): Not dangerous goods

14.4 Packing group: no applicable

14.5 Environmental hazards: Not dangerous goods

14.6 Special precautions for user: Not dangerous goods

14.7 Transportation bulk according to Anne xII of MARPOL73/78 and the IBC Code

Additional information All transport carriers Land transport (ADR/RID) Tunnel

Restriction code: Not applicable

Classification code: Not applicable

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Transport category: Not applicable  
Hazard identification number(KemlerNo.): Not applicable  
Limited quantity(LQ): Not applicable  
Special provisions: Not applicable  
Sea transport(IMDG)  
Marine pollutant: Not applicable  
Segregation group: Not applicable  
Limited quantity(LQ): Not applicable  
Special provisions: Not applicable  
Air transport(ICAOTI/IATA-DGR)  
Limited quantity(LQ): Not applicable  
Special provisions: Not applicable

### Section 15 Regulatory Information

EU regulations: Conform to Annex I of 96/82/EC  
National regulations: Conform to SHE regulation <Safety of chemical and hazard products>  
Chemical Safety Assessment: Not dangerous goods.  
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

### Section 16 Other Information

This advice is given by Cambridge Commodities Ltd who accepts no legal liability for it. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.

Individuals working with chemicals should consider all chemicals to be potentially hazardous even if their individual hazards may be uncharacterised or unknown.

This Information provided in this document is subject to change and the batch specific Certificate of Analysis should always be referenced.

To be used as per local legislation.



### Change History

Version	Change	Customer Notification required Yes / No
1	First Issue	N/A
2	Confirmed Salmonella is tested for in 25g and E. coli in 1g.	Yes

### Document Approval

Originator Job Title	QC Team Leader	Approver Job Title	Quality Specialist
<i>Ash Bean</i> Ash Bean (Jan 25, 2018)		<i>Matthew Vincent</i>	










# P34259-Creatine Monohydrate 200 Mesh-Technical Dossier

Adobe Sign Document History

01/25/2018

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By:	Ash Bean (ash.bean@c-c-l.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAS9Yk5GfHFeZaA-i5B7hbtsD5Y_FSdFyl

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