

## Technical Data Sheet

**Product Name:** Micronized Creatine Monohydrate 1000mesh

**Trade Brand:** Smartherb

| Technical Data Sheet         |                                                                                                                   |                  |                 |
|------------------------------|-------------------------------------------------------------------------------------------------------------------|------------------|-----------------|
| AC Code                      | SH070150b                                                                                                         | CAS number       | 6020-87-7       |
| Molecular formula            | C <sub>4</sub> H <sub>11</sub> N <sub>3</sub> O <sub>3</sub>                                                      | Molecular weight | 149.15 g/mol    |
| Origin                       | China                                                                                                             | Solvent          | -               |
| Solvent Used                 | -                                                                                                                 |                  |                 |
| Item                         | Standard                                                                                                          | Analysis Method  |                 |
| Appearance                   | White fine powder                                                                                                 | Visual           |                 |
| Odor & Taste                 | Characteristic                                                                                                    | Organoleptic     |                 |
| Typical Analysis             |                                                                                                                   |                  |                 |
| Identification               | Consistent with the standard spectrum                                                                             |                  | HPLC            |
| Assay                        | 99.5%Min                                                                                                          |                  | GC              |
| Particle Size                | 95% Pass 1000 Mesh                                                                                                |                  | Sieve analysis  |
| Loss on drying               | ≤12%                                                                                                              |                  | Ph. Eur. 2.2.32 |
| Residue on Ignition          | ≤0.1%                                                                                                             |                  | Ph. Eur. 2.2.32 |
| Creatinine                   | ≤100mg/kg                                                                                                         |                  | HPLC            |
| Dicyanamide                  | ≤50mg/kg                                                                                                          |                  | HPLC            |
| Cyanide                      | ≤1mg/kg                                                                                                           |                  | Colorimetry     |
| Contaminants                 |                                                                                                                   |                  |                 |
| Benzo(a)pyrene               | ≤ 10μg/kg                                                                                                         |                  | (EU) 915/2023   |
| PAH4                         | ≤50μg/kg                                                                                                          |                  | (EU) 915/2023   |
| Aflatoxin (Σ B1, B2, G1, G2) | < 10ppb                                                                                                           |                  | Ph. Eur. 2.8.18 |
| Aflatoxin B1                 | < 5ppb                                                                                                            |                  | Ph. Eur. 2.8.18 |
| Heavy metals                 |                                                                                                                   |                  |                 |
| Heavy metals                 | ≤ 10ppm                                                                                                           |                  | ICP-MS          |
| Lead (Pb)                    | ≤ 1ppm                                                                                                            |                  | ICP-MS          |
| Arsenic (As)                 | ≤ 1ppm                                                                                                            |                  | ICP-MS          |
| Cadmium (Cd)                 | ≤ 1ppm                                                                                                            |                  | ICP-MS          |
| Mercury (Hg)                 | ≤ 0.1ppm                                                                                                          |                  | ICP-MS          |
| Microorganism                |                                                                                                                   |                  |                 |
| Total Bacterial Count        | ≤10 cfu/g Max                                                                                                     |                  | Ph. Eur. 2.6.12 |
| Total Molds Count            | Negative                                                                                                          |                  | Ph. Eur. 2.6.12 |
| Salmonella                   | Negative                                                                                                          |                  | Ph. Eur. 2.6.13 |
| E. coli                      | Negative                                                                                                          |                  | Ph. Eur. 2.6.13 |
| Staphylococcus aureus        | Negative                                                                                                          |                  | Ph. Eur. 2.6.13 |
| Package                      | 25Kg/drum                                                                                                         |                  |                 |
| Shelf life                   | The shelf life for the product is 24 months from date of production. Use it as soon as possible once it is opened |                  |                 |
| Storage                      | Store in well-closed container at room temperature, protect from light, moisture and pest infestation.            |                  |                 |

## INGREDIENTS

An ingredient is defined in Directive 2000/13/EC on labelling: "ingredient means any substance including additives, used in the production or preparation of a foodstuff and still present in the finished product although possibly in a modified form" i.e. all raw materials to produce the goods.

Please list all ingredients:

| Ingredients/material composition | %    | Country of origin |
|----------------------------------|------|-------------------|
| Creatine Monohydrate             | 100% | China             |
|                                  |      |                   |

## ORIGIN

|                                               |                                                                                                                                                                                                              |         |                             |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----------------------------|
| Country of origin of the product              |                                                                                                                                                                                                              |         |                             |
| Is a manufacturing process available          | <input type="checkbox"/> YES                                                                                                                                                                                 |         | <input type="checkbox"/> NO |
| Source of the product:                        | <input type="checkbox"/> Animal <input type="checkbox"/> Plant <input type="checkbox"/> Mineral origin <input checked="" type="checkbox"/> Synthetic<br><input type="checkbox"/> Biotechnological processing |         |                             |
| <b>please answer the following questions.</b> |                                                                                                                                                                                                              |         |                             |
| Starting material:                            | Creatine Monohydrate                                                                                                                                                                                         | Origin: | China                       |

## GENETICALLY MODIFIED ORGANISMS-GMO

According to EU regulations EC/1829/2003 & EC/1830/2003

According to the EU regulations concerning the traceability and labelling of Genetically Modified Organisms (GMO), and the traceability of food products produced from GMO, we confirm that the product:

|                                                                                                                                                                                                                                 |                                         |                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|----------------------------------------|
| Contains ingredient(s) from Maize and/or Soya origin                                                                                                                                                                            | <input type="checkbox"/> YES            | <input checked="" type="checkbox"/> NO |
| Contains no material which contains, consists of or is produced from authorized GMOs in proportion higher than 0,9%. This presence is adventitious or technically unavoidable                                                   | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO            |
| is GMO or contains or consists of GMOs                                                                                                                                                                                          | <input type="checkbox"/> YES            | <input checked="" type="checkbox"/> NO |
| is produced from GMOs or contains ingredients produced from GMOs                                                                                                                                                                | <input type="checkbox"/> YES            | <input checked="" type="checkbox"/> NO |
| Contains ingredient(s) from other potential GMO-risk raw material(s) (rice, beet, cotton ...)                                                                                                                                   | <input type="checkbox"/> YES            | <input checked="" type="checkbox"/> NO |
| If Yes, please specify:<br>o ingredient:<br>o vegetable origin:<br>o geographic origin:                                                                                                                                         |                                         |                                        |
| Contains no material which contains, consists of or is produced from evaluated GMOs in proportion higher than 0,5%. This presence is adventitious or technically unavoidable                                                    | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO            |
| For information about processing aids,<br>is produced or contains ingredient(s) produced with GMOs or Genetically Modified Microorganisms processing aids (bacteria, yeast... or derived from GMOs or GMMs (including enzymes)) | <input type="checkbox"/> YES            | <input checked="" type="checkbox"/> NO |

|                                                                                                                                              |                                         |                             |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------|
| If yes, please specify:                                                                                                                      |                                         |                             |
| We confirm that the ingredient supplied is compliant in all respects with the Regulations N°1829/2003/EC and N°1830/2003/EC where applicable | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO |

## SUBSTANCES OR PRODUCTS CAUSING ALLERGIES OR INTOLERANCES

According to Regulation(EU)No.1169/2011 as regards of ingredients present in foodstuffs

| Allergenic substances<br>(Regulation EU 1169/2011 – Annex II)                                       | Present in finished product | Present in the manufacturing site | Present on the same manufacturing line | Possible cross-contamination |
|-----------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------------|----------------------------------------|------------------------------|
| Cereals containing gluten (i.e. wheat, rye, barley, oats, spelt, kamut or their hybridised strains) | NO                          | NO                                | NO                                     | NO                           |
| Crustaceans and products thereof                                                                    | NO                          | NO                                | NO                                     | NO                           |
| Eggs and products thereof                                                                           | NO                          | NO                                | NO                                     | NO                           |
| Fish and products thereof                                                                           | NO                          | NO                                | NO                                     | NO                           |
| Peanuts and products thereof                                                                        | NO                          | NO                                | NO                                     | NO                           |
| Soybeans and products thereof                                                                       | NO                          | NO                                | NO                                     | NO                           |
| Milk and products thereof (including lactose)                                                       | NO                          | NO                                | NO                                     | NO                           |
| Nuts (almond, hazelnut, walnut, cashew, pecan nut, Brazil nut, pistachio nut, macadamia nut)        | NO                          | NO                                | NO                                     | NO                           |
| Celery and products thereof                                                                         | NO                          | NO                                | NO                                     | NO                           |
| Mustard and products thereof                                                                        | NO                          | NO                                | NO                                     | NO                           |
| Sesame seeds and products thereof                                                                   | NO                          | NO                                | NO                                     | NO                           |
| Sulphur dioxide and sulphites (>10 mg/kg or 10 mg/L expressed as SO <sub>2</sub> )                  | NO                          | NO                                | NO                                     | NO                           |
| Lupin and products thereof                                                                          | NO                          | NO                                | NO                                     | NO                           |
| Molluscs and products thereof                                                                       | NO                          | NO                                | NO                                     | NO                           |

## NON IRRADIATION

According to UE Directive No.1999/2/CE

|                                                                            |                                         |                                        |
|----------------------------------------------------------------------------|-----------------------------------------|----------------------------------------|
| Has this raw material or one of its ingredients been irradiated or ionised | <input type="checkbox"/> YES            | <input checked="" type="checkbox"/> NO |
| We confirm above non-irradiation statement is available                    | <input checked="" type="checkbox"/> YES |                                        |

## NANOMATERIAL

According to Regulation(EU)No 1169/2011

|                                                                                      |                              |                                        |
|--------------------------------------------------------------------------------------|------------------------------|----------------------------------------|
| Does this raw material contain or can be considered as engineered nanomaterial       | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO |
| Does this raw material have been made with nanotechnology?                           | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO |
| Does the product contain nanotechnology as defined by the French decree no.2012-232? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO |

## WADA Anti-Doping Statement

Current WADA Prohibited List

|                                                                                                                            |                              |                                        |
|----------------------------------------------------------------------------------------------------------------------------|------------------------------|----------------------------------------|
| Does the product contain any prohibited substances (hormones, anabolic agents, stimulants) listed on WADA Prohibited List? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO |
| Is there any risk of cross-contamination with WADA banned substances during production?                                    | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO |

## RESIDUAL SOLVENTS

According to UE Directive 2009/32 modified by (UE)2010/59 and CPMP/ICH/283/95Q3C

|                                                                                                  |                              |                                        |
|--------------------------------------------------------------------------------------------------|------------------------------|----------------------------------------|
| Does the raw material contain any residual solvent                                               | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO |
| If yes, please give:<br>percentage and name of each solvent used:<br>level of residual solvents: |                              |                                        |
| Is the product in compliance with the UE Directive 2009/32                                       | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO |
| Is the product in compliance with the ICH guidelines                                             | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO |

## FOOD CERTIFICATE

|                                                                                 |                                         |                                    |                                    |                                           |
|---------------------------------------------------------------------------------|-----------------------------------------|------------------------------------|------------------------------------|-------------------------------------------|
| Manufacturer's quality certificates:                                            |                                         |                                    |                                    |                                           |
| ISO 9001 <input type="checkbox"/>                                               | HACCP <input type="checkbox"/>          | ISO 14001 <input type="checkbox"/> | ISO 22000 <input type="checkbox"/> | <input checked="" type="checkbox"/> OTHER |
| Is the raw material Food Grade?                                                 | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO        |                                    |                                           |
| Can the product be used in baby food(Directive 2006/141/CE)?                    | <input type="checkbox"/> YES            | <input type="checkbox"/> NO        |                                    |                                           |
| Does the product comply with the UE Regulation No231/2012 about additives?      | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO        |                                    |                                           |
| Is the product complying with a Pharmacopeia monography?                        | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO        |                                    |                                           |
| Is the product complying with the UE Regulation No.1334/2008 about flavourings? | <input type="checkbox"/> YES            | <input type="checkbox"/> NO        |                                    |                                           |
| Was the product used in the European food industry before May 1997?             | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO        |                                    |                                           |
| If no, could you provide an authorisation (according to Regulation 258/97/EC)?  | <input type="checkbox"/> YES            | <input type="checkbox"/> NO        |                                    |                                           |
| Are stability studies available?                                                | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO        |                                    |                                           |

## CONTAMINANTS

| Is the product conforming to UE regulations No 2023/915 setting maximum levels for certain contaminants in foodstuffs,as amended? |                        | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO |
|-----------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------------------------------------|-----------------------------|
| Contaminants                                                                                                                      | Tested?                | Result                                  |                             |
| Pesticides (multi-residue)?                                                                                                       | Can be provide if need | Complies with EU 396/2005               |                             |
| Dioxins and dioxin like PCBs?                                                                                                     | NO                     | Complies with EU 915/2023               |                             |
| Heavy metals                                                                                                                      | Can be provide if need | Complies ( $\leq 10$ ppm)               |                             |
| PAHs(PAH4)                                                                                                                        | Can be provide if need | Complies with EU 915/2023               |                             |
| Benzo[a]pyrens?                                                                                                                   | Can be provide if need | Complies with EU 915/2023               |                             |
| Mycotoxins (Aflatoxins, OTA)                                                                                                      | Can be provide if need | Complies with EU 915/2023               |                             |
| 3-MCPD                                                                                                                            | NO                     | Not applicable                          |                             |
| Doping like substances?<br><a href="http://list.wada-ama.org/">http://list.wada-ama.org/</a>                                      | NO                     | Not applicable                          |                             |

## FOREIGN BODIES

| Which material do you use in order to fight against the foreign bodies |           |                |                                          |
|------------------------------------------------------------------------|-----------|----------------|------------------------------------------|
|                                                                        | Presence? | Test frequency | Where is it located on the process line? |
| Magnet                                                                 | YES       | Continuous     | Raw material intake / processing line    |
| Metal detector                                                         | YES       | Each batch     | Before packaging                         |
| Sieve                                                                  | YES       | Continuous     | During processing                        |
| Filter                                                                 | YES       | Continuous     | Extraction / filtration stage            |
| X-ray detection                                                        | NO        | N/A            | N/A                                      |
| Other(please specify)                                                  |           |                |                                          |

## TRACEABILITY

|                                                 |                                                                                       |
|-------------------------------------------------|---------------------------------------------------------------------------------------|
| Batch size                                      | 500kg                                                                                 |
| Batch definition                                | A batch is defined as a homogeneous production lot produced under the same conditions |
| Signification of the batch number by an example |                                                                                       |
| Marking method (labelling...)                   |                                                                                       |

## PACKAGING

|                                                                                                            |                                                                     |
|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| Is the packaging material approved as food grade according to regulations 1935/2004,10/2011 and 1282/2011? | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO |
| Do you guarantee the packaging traceability according to regulation 1935/2004(art 17)?                     | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO |



SmartHerb

Innovating Botanical Health

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|                                                                                                                                                                  |                                         |                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------|
| Can you guarantee that the product and its packaging supplied to do not contain Phtalates?                                                                       | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO |
| Can you guarantee that the product and its packaging supplied to do not contain ITX? (A packaging contaminant:Isopropylthioxanthone(ITX)found in dairy products) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO |
| Can you guarantee that the product and its packaging supplied to do not contain BisphenolA(BPA)?                                                                 | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO |
| Do you add desiccant bags during packaging process? If so,where do you mention it:.....                                                                          | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO |
| Can you provide migration test in order to guarantee packaging safety?                                                                                           | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO |