

## Technical Data Sheet

**Product Name:** PhytoTrust™ Ginger Extract 5% Gingerols (EP)

**Trade Brand:** SmartHerb

| Technical Data Sheet  |                                                                                                        |              |                                     |
|-----------------------|--------------------------------------------------------------------------------------------------------|--------------|-------------------------------------|
| Botanical Name        | Zingiber Officinale Rosc.                                                                              | Part         | The rhizomes of Zingiber officinale |
| AC Code               | SH03986d                                                                                               | CAS number   | 23513-14-6                          |
| Origin                | China                                                                                                  | Solvent Used | Water&ethanol                       |
| Item                  | Standard                                                                                               |              | Analysis Method                     |
| Appearance            | Yellowish Powder                                                                                       |              | Visual                              |
| Odor & Taste          | Characteristic                                                                                         |              | Organoleptic                        |
| Typical Analysis      |                                                                                                        |              |                                     |
| Identification        | Compliant with standard reference                                                                      |              | HPLC/TLC                            |
| Assay                 | Gingerols≥5.0%                                                                                         |              | HPLC/(Cal.)                         |
| Ash                   | ≤5.0%                                                                                                  |              | Ph. Eur. 2.4.16                     |
| Particle Size         | ≥95% through 80 meshes                                                                                 |              | Sieve analysis                      |
| Loss on drying        | ≤ 6.0%                                                                                                 |              | Eur.Ph.7.0<2.8.17>                  |
| Residual solvents     |                                                                                                        |              |                                     |
| Ethanol               | ≤5000ppm                                                                                               |              | GC                                  |
| Pesticide Residue     | Comply with EC 396/2005                                                                                |              | GC-MS/LC-MS                         |
| Non irradiated        | ≤700                                                                                                   |              | EN13751:2002<PSL>                   |
| Benzo(a)pyrene        | ≤10μg/kg                                                                                               |              | (EU) 915/2023                       |
| PAH4                  | ≤50μg/kg                                                                                               |              | (EU) 915/2023                       |
| Heavy metals          |                                                                                                        |              |                                     |
| Heavy metals          | ≤ 10ppm                                                                                                |              | ICP-MS                              |
| Lead (Pb)             | ≤ 3.0ppm                                                                                               |              | ICP-MS                              |
| Arsenic (As)          | ≤ 1.0ppm                                                                                               |              | ICP-MS                              |
| Cadmium (Cd)          | ≤ 1.0ppm                                                                                               |              | ICP-MS                              |
| Mercury (Hg)          | ≤ 0.1ppm                                                                                               |              | ICP-MS                              |
| Microorganism         |                                                                                                        |              |                                     |
| Total Bacterial Count | <1000cfu/g                                                                                             |              | Ph. Eur. 2.6.12                     |
| Total Molds Count     | <100cfu/g                                                                                              |              | Ph. Eur. 2.6.12                     |
| Staphylococcus aureus | Negative                                                                                               |              | Ph. Eur. 2.6.12                     |
| Salmonella            | Negative                                                                                               |              | Ph. Eur. 2.6.13                     |
| Package               | N.W. 25Kgs/fiber drum and two plastic bags inside.                                                     |              |                                     |
| Shelf life            | 2 Year When Properly Store                                                                             |              |                                     |
| 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 |
|----------------------------------|------|-------------------|
| Ginger Extract                   | 100% | China             |
|                                  |      |                   |
|                                  |      |                   |

## ORIGIN

|                                                                       |                                     |                                                                                                                                                                                                              |                             |
|-----------------------------------------------------------------------|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| Country of origin of the product:China                                |                                     |                                                                                                                                                                                                              |                             |
| Is a manufacturing process available                                  |                                     | <input checked="" type="checkbox"/> YES                                                                                                                                                                      | <input type="checkbox"/> NO |
| Source of the product:                                                |                                     | <input type="checkbox"/> Animal <input checked="" type="checkbox"/> Plant <input type="checkbox"/> Mineral origin <input type="checkbox"/> Synthetic<br><input type="checkbox"/> Biotechnological processing |                             |
| <b>please answer the following questions.</b>                         |                                     |                                                                                                                                                                                                              |                             |
| Botanical name                                                        | Zingiber Officinale Rosc.           | Geographical origin                                                                                                                                                                                          | China                       |
| Part of the plant                                                     | The rhizomes of Zingiber officinale | Wild or Cultivated                                                                                                                                                                                           | Cultivated                  |
| Harvest method                                                        | Manual harvesting                   | Harvest period                                                                                                                                                                                               | From Spring to Autum        |
| Is the technical data sheet of the plant raw material available       |                                     | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO                                                                                                                                          |                             |
| Are there any agents responsible for adverse effects                  |                                     | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO                                                                                                                                          |                             |
| If yes,please precise:                                                |                                     |                                                                                                                                                                                                              |                             |
| Please precise the methods of eliminating risk constituents:          |                                     |                                                                                                                                                                                                              |                             |
| <b>Could you precise the treatments used on the plant harvesting?</b> |                                     |                                                                                                                                                                                                              |                             |
| Irrigation                                                            | Fertilizers                         | Herbicides                                                                                                                                                                                                   | Insecticides                |
| Yes                                                                   | Yes                                 | Controlled use                                                                                                                                                                                               | Controlled use              |
|                                                                       |                                     |                                                                                                                                                                                                              |                             |

|                                                                          |                                            |                                                 |                                                       |
|--------------------------------------------------------------------------|--------------------------------------------|-------------------------------------------------|-------------------------------------------------------|
| <b>Could you precise the treatments /transformations after harvest?</b>  |                                            |                                                 |                                                       |
| <input checked="" type="checkbox"/> Decontaminated plant(treatment used: |                                            | <input type="checkbox"/> Undecontaminated plant |                                                       |
| <input checked="" type="checkbox"/> Washing                              | <input checked="" type="checkbox"/> Drying | <input type="checkbox"/> Natural drying:        | <input checked="" type="checkbox"/> Artificial drying |
| Other:                                                                   |                                            |                                                 |                                                       |
| <b>If mineral origin, please specify species</b>                         |                                            |                                                 |                                                       |
| <b>If syntheric, please specify species</b>                              |                                            |                                                 |                                                       |

## 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                                                                                                                                                | <input type="checkbox"/> YES            | <input checked="" type="checkbox"/> NO |

|                                                                                                                                                                                                                            |                                         |                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|----------------------------------------|
| material(s)(rice,beet cotton ...)                                                                                                                                                                                          |                                         |                                        |
| 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<br>- Annex II)                                             | Present in finished<br>product | Present in the<br>manufacturing<br>site | Present on the same<br>manufacturing line | Possible cross-<br>contamination |
|--------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|-------------------------------------------|----------------------------------|
| Cereals containing gluten<br>(i.e. wheat, rye, barley, oats,<br>spelt, kamut or their<br>hybridised strains) | NO                             | NO                                      | NO                                        | NO                               |
| Crustaceans and products<br>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<br>thereof                                                                             | NO                             | NO                                      | NO                                        | NO                               |
| Milk and products thereof<br>(including lactose)                                                             | NO                             | NO                                      | NO                                        | NO                               |
| Nuts (almond, hazelnut,<br>walnut, cashew, pecan nut,<br>Brazil nut, pistachio nut,<br>macadamia nut)        | NO                             | NO                                      | NO                                        | NO                               |
| Celery and products thereof                                                                                  | NO                             | NO                                      | NO                                        | NO                               |
| Mustard and products<br>thereof                                                                              | NO                             | NO                                      | NO                                        | NO                               |
| Sesame seeds and products<br>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 checked="" type="checkbox"/> YES | <input type="checkbox"/> NO |
| If yes, please give:<br>percentage and name of each solvent used: Water & Ethanol<br>level of residual solvents: Ethanol ≤ 5000ppm |                                         |                             |
| Is the product in compliance with the UE Directive 2009/32                                                                         | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO |
| Is the product in compliance with the ICH guidelines                                                                               | <input checked="" type="checkbox"/> YES | <input 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 checked="" type="checkbox"/> NO |                                           |
| Does the product comply with the UE Regulation No231/2012 about additives? | <input type="checkbox"/> YES            |                                    | <input checked="" type="checkbox"/> NO |                                           |
| Is the product complying with a Pharmacopeia monography?                   | <input type="checkbox"/> YES            |                                    | <input checked="" type="checkbox"/> NO |                                           |

|                                                                                 |                                         |                                        |
|---------------------------------------------------------------------------------|-----------------------------------------|----------------------------------------|
| Is the product complying with the UE Regulation No.1334/2008 about flavourings? | <input type="checkbox"/> YES            | <input checked="" 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 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)                                                  |           |                |                                          |

## NUTRITIONAL VALUES

| Nutritional Composition                                                                     | <input checked="" type="checkbox"/> Per 100g | <input type="checkbox"/> Per serving |
|---------------------------------------------------------------------------------------------|----------------------------------------------|--------------------------------------|
| Energy                                                                                      | 1250 kJ / 300 kcal                           |                                      |
| Total Fat                                                                                   | 1.0 g                                        |                                      |
| Total Carbohydrate                                                                          | 60.0 g                                       |                                      |
| Fibre                                                                                       | 15.0 g                                       |                                      |
| Protein                                                                                     | 5.0 g                                        |                                      |
| Salt                                                                                        | <0.10 g                                      |                                      |
| Vitamins:                                                                                   | /                                            |                                      |
| Minerals:                                                                                   | /                                            |                                      |
| Remarks: Nutrition Data are obtained by 3 <sup>nd</sup> party lab; tested on a yearly basis |                                              |                                      |

## TRACEABILITY

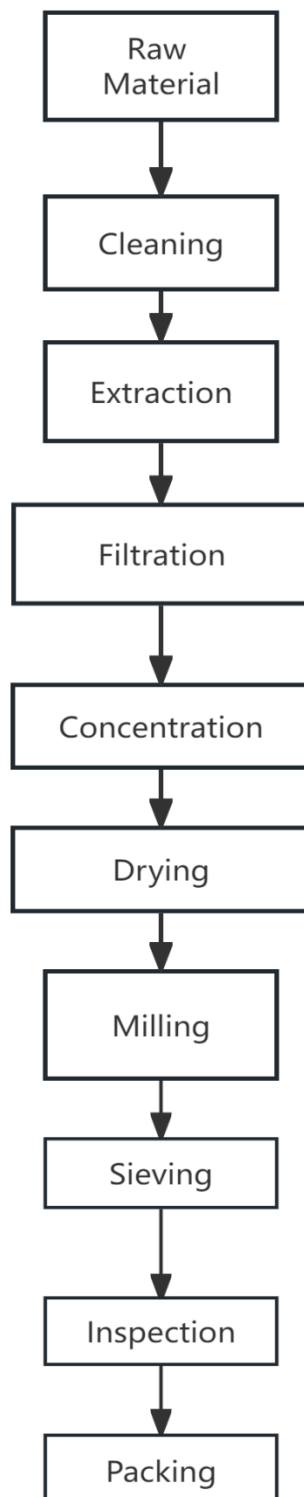
|                                                 |                                                                                       |
|-------------------------------------------------|---------------------------------------------------------------------------------------|
| Batch size                                      | 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 |
| 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 |



## Flow Chart



## Safety Data Sheet (SDS)

Revision: 02/27/2026  
Validity period: 02/26/2027

| Section 1 Identification of Substance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                           |                         |              |                   |               |             |               |                   |               |                          |                                |           |       |                   |                |      |       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-------------------------|--------------|-------------------|---------------|-------------|---------------|-------------------|---------------|--------------------------|--------------------------------|-----------|-------|-------------------|----------------|------|-------|
| Product Name:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Ginger Extract 5% Gingerols (EP)                                                                          | Supplier / trade brand: | Smarterb Inc |                   |               |             |               |                   |               |                          |                                |           |       |                   |                |      |       |
| Address:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No.76-3 Chengnan Road, Huaxi Subdistrict, Changxing County, Huzhou City, Zhejiang Province, 313100, China |                         |              |                   |               |             |               |                   |               |                          |                                |           |       |                   |                |      |       |
| <div>Section 2 Hazards Identification</div> <div>Label elements</div> <table><tr><td>Hazard pictograms</td><td>None required</td></tr><tr><td>Signal word</td><td>None required</td></tr><tr><td>Hazard statements</td><td>None required</td></tr><tr><td>Precautionary statements</td><td>Avoiding exposure and leakage.</td></tr></table> <div>Section 3 Composition, Information on Ingredients</div> <table><tr><th>Component</th><th>Ratio</th><th>Country of origin</th></tr><tr><td>Ginger Extract</td><td>100%</td><td>China</td></tr></table> <div>Section 4 First Aid Measures</div> <div>4.1 Description of first aid measures</div> <p>Inhalation: Move the person to fresh air. Keep at rest. Obtain medical advice if irritation, coughing or breathing discomfort persists.</p> <p>Skin contact: Wash with water and soap. Remove contaminated clothing. Obtain medical advice if irritation persists.</p> <p>Eye contact: Rinse cautiously with clean water for at least 15 minutes, including under the eyelids. Remove contact lenses if present and easy to do. Seek medical advice if irritation persists.</p> <p>Ingestion: Rinse mouth. Do not induce vomiting. Give water if the person is conscious. Obtain medical advice if a large amount is swallowed or symptoms occur.</p> <div>4.2 Most important symptoms and effects, both acute and delayed</div> <p>Dust may cause temporary mechanical irritation of the eyes, nose, throat or respiratory tract. No product-specific delayed effects are known from the available information.</p> <div>4.3 Indication of immediate medical attention and special treatment</div> <p>Treat symptomatically. No specific antidote is known.</p> |                                                                                                           |                         |              | Hazard pictograms | None required | Signal word | None required | Hazard statements | None required | Precautionary statements | Avoiding exposure and leakage. | Component | Ratio | Country of origin | Ginger Extract | 100% | China |
| Hazard pictograms                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | None required                                                                                             |                         |              |                   |               |             |               |                   |               |                          |                                |           |       |                   |                |      |       |
| Signal word                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | None required                                                                                             |                         |              |                   |               |             |               |                   |               |                          |                                |           |       |                   |                |      |       |
| Hazard statements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | None required                                                                                             |                         |              |                   |               |             |               |                   |               |                          |                                |           |       |                   |                |      |       |
| Precautionary statements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Avoiding exposure and leakage.                                                                            |                         |              |                   |               |             |               |                   |               |                          |                                |           |       |                   |                |      |       |
| Component                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Ratio                                                                                                     | Country of origin       |              |                   |               |             |               |                   |               |                          |                                |           |       |                   |                |      |       |
| Ginger Extract                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 100%                                                                                                      | China                   |              |                   |               |             |               |                   |               |                          |                                |           |       |                   |                |      |       |



## Section 5 Fire-Fighting Measures

### 5.1 Extinguishing media

Suitable media: Water spray, carbon dioxide, dry chemical powder or suitable foam. Select media appropriate to the surrounding fire.

Unsuitable media: Avoid a high-pressure water jet where it could disperse accumulated powder.

### 5.2 Special hazards arising from the substance

The product is not classified as flammable. Thermal decomposition or combustion may produce carbon monoxide, carbon dioxide and nitrogen oxides. Dispersed fine dust may form a combustible dust-air mixture.

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus and full protective clothing when fighting a significant fire. Prevent contaminated firefighting water from entering drains or surface water where practicable.

## Section 6 Accidental Release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Avoid dust formation and inhalation. Wear eye protection and suitable work gloves. Use particulate respiratory protection when ventilation is insufficient or significant airborne dust is generated.

### 6.2 Environmental precautions

Prevent large quantities from entering drains, surface water or soil. Notify the relevant authority if a significant release reaches the environment.

### 6.3 Methods and material for containment and cleaning up

Collect with an industrial vacuum fitted with an appropriate particulate filter, or sweep carefully while minimising dust. Place in a labelled, closed container for recovery or disposal. After bulk collection, wipe remaining residue with a damp cloth. Do not use compressed air for cleaning.

## Section 7 Handling and Storage

### 7.1 Precautions for safe handling

Use adequate ventilation or local exhaust where dust may be generated. Avoid contact with eyes and prolonged skin contact. Avoid ingestion and inhalation of dust. Prevent dust accumulation on surfaces. Keep away from ignition sources where dust clouds may occur. Wash hands after handling and before eating, drinking or smoking.

### 7.2 Conditions for safe storage, including incompatibilities

Keep the container tightly closed in a cool, dry and well-ventilated place. Keep away from strong oxidising agents, strong acids and strong bases.

### 7.3 Specific end use

Raw material for professional manufacture. Follow the applicable product specification, food hygiene requirements and workplace risk assessment.

## Section 8 Exposure Controls/Personal Protection

### 8.1 Exposure controls

Engineering controls: Provide general ventilation and local dust extraction at transfer, weighing, milling or filling points. Avoid open handling that creates visible dust clouds.

Eye/face protection: Safety glasses with side shields or goggles conforming to EN 166 where dust exposure is possible.

Hand protection: Suitable protective gloves selected according to the workplace risk assessment. Inspect before use.

Skin/body protection: Clean work clothing. Remove and wash contaminated clothing before reuse.

Respiratory protection: Normally not required with adequate ventilation. If significant dust is generated, use an EN 149-compliant particulate respirator, such as FFP2, or equivalent, as determined by the risk assessment.

Hygiene measures: Do not eat, drink or smoke in handling areas. Wash hands and exposed skin after use.

Environmental exposure controls: Avoid uncontrolled release of large quantities to drains or the environment.

## Section 9 Physical and Chemical Properties

|                                       |                                               |
|---------------------------------------|-----------------------------------------------|
| Physical States                       | [ ] Gas [ ] Liquid [ X ] Solid                |
| Melting Point                         | No data available.                            |
| Boiling Point                         | No data available.                            |
| Autoignition Pt                       | No data available.                            |
| Flash Pt                              | No data available.                            |
| Explosive Limits                      | LEL No data available. UEL No data available. |
| Specific Gravity (Water = 1)          | No data available.                            |
| Vapor Pressure (vs. Air or mm Hg)     | No data available.                            |
| Vapor Density (vs. Air = 1)           | No data available.                            |
| Evaporation Rate (vs Butyl Acetate=1) | No data available.                            |
| Relative density                      | No data available.                            |
| Solubility in Water                   | Dissolve in water                             |
| Partition coefficient                 | No data available.                            |
| Auto-ignition temperature             | No data available.                            |
| Viscosity                             | No data available.                            |
| Decomposition temperature             | No data available.                            |
| PH                                    | No data available.                            |
| Appearance and Odor                   | Yellowish Powder                              |

## Section 10 Stability and Reactivity

**10.1 Reactivity:** No hazardous reaction is expected under recommended handling and storage conditions.

**10.2 Chemical stability:** Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions:** Hazardous polymerisation is not expected.

**10.4 Conditions to avoid:** Excessive heat, moisture, contamination, dust accumulation and ignition sources where a dust cloud may form.

**10.5 Incompatible materials:** Strong oxidising agents, strong acids and strong bases.

**10.6 Hazardous decomposition products:** Carbon monoxide, carbon dioxide and nitrogen oxides may be generated by thermal decomposition or combustion.

## Section 11 Toxicological Information

| Endpoint                          | Assessment                                                                                                                      |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Acute toxicity                    | No adequate product-specific data are available. No basis for classification has been identified from the information reviewed. |
| Skin corrosion/irritation         | Not classified based on available information. Dust may cause temporary mechanical irritation.                                  |
| Serious eye damage/irritation     | Not classified based on available information. Dust may cause temporary mechanical irritation.                                  |
| Respiratory or skin sensitisation | No adequate product-specific data are available.                                                                                |
| Germ cell mutagenicity            | No adequate product-specific data are available. No basis for classification has been identified.                               |
| Carcinogenicity                   | No adequate product-specific data are available. No basis for classification has been identified.                               |
| Reproductive toxicity             | No adequate product-specific data are available. No basis for classification has been identified.                               |

|                              |                                                                                                                                      |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| STOT - single exposure       | Not classified based on available information. Airborne dust may cause transient respiratory irritation.                             |
| STOT - repeated exposure     | No adequate product-specific data are available.                                                                                     |
| Aspiration hazard            | Not applicable to the product in solid form.                                                                                         |
| Likely routes of exposure    | Inhalation of dust, eye contact, skin contact and ingestion.                                                                         |
| Symptoms and delayed effects | Dust may cause temporary mechanical irritation. No adequate product-specific information on delayed or chronic effects is available. |

## Section 12 Ecological Information

|                               |                                                                                                                                   |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Toxicity                      | No adequate product-specific aquatic toxicity data are available.                                                                 |
| Persistence and degradability | No adequate product-specific biodegradation data are available.                                                                   |
| Bioaccumulative potential     | Significant bioaccumulation is not expected based on water solubility, but no product-specific study has been supplied.           |
| Mobility in soil              | The substance is water soluble and may be mobile in aqueous environments. No product-specific soil adsorption data are available. |

## Section 13 Disposal Considerations

### 13.1 Waste treatment methods

Product waste: Recover or recycle where practicable. Otherwise dispose of through an authorised waste contractor in accordance with applicable national and local requirements. Do not discharge bulk material to drains.

Contaminated packaging: Empty completely. Recycle or dispose of according to local requirements. Do not reuse contaminated packaging for food or feed.

## Section 14 Transport Information

| Transport mode      | Classification                   |
|---------------------|----------------------------------|
| ADR/RID (road/rail) | Not regulated as dangerous goods |
| IMDG (sea)          | Not regulated as dangerous goods |
| IATA/ICAO (air)     | Not regulated as dangerous goods |

## Section 15 Regulatory Information

This SDS has been prepared with reference to Regulation (EC) No 1907/2006 (REACH), as amended, including the SDS requirements introduced by Regulation (EU) 2020/878, and Regulation (EC) No 1272/2008 (CLP), as amended.

## Section 16 Other Information

This SDS is issued based on the latest official test data and industry standard specifications for Ginger Extract All contents are for safety guidance only.

