

## PRODUCT INFORMATION

See also [www.organic.nl](http://www.organic.nl)

|                          |   |
|--------------------------|---|
| <b>Product</b>           | <b>Manioc starch/ tapioca</b>                             |
| <b>Code</b>              | <b>50230</b>  |
| <b>Certificate</b>       | <b>BioAgriCert</b>  |
| <b>Country of origin</b> | <b>Thailand</b>   |
| <b>Last update</b>       | <b>11-04-2018</b>   |
| <b>Date of issue</b>     | <b>03-06-2013</b>   |
| <b>This product is</b>   | <b>Organic and not genetically modified or irradiated</b> |

|                    |   |
|--------------------|---|
| <b>Production</b>  |   |
| <b>Ingredients</b> | <b>Manioc/tapioca</b>   |
| <b>Additives</b>   | <b>No additives</b>   |
| <b>Process</b>     | <b>Wash the roots, crashing, centrifugation, separation of water and starch by vacuum filter, drying, packing</b> |

|                             |  |
|-----------------------------|--|
| <b>Sensorial properties</b> |  |
| <b>Smell</b>                | <b>Neutral, product specific</b>                   |
| <b>Colour</b>               | <b>White (whiteness max 93 kett model C 100-3)</b> |
| <b>Taste</b>                | <b>Product specific</b>                            |
| <b>Appearance</b>           | <b>Very fine powder</b>                            |

|                                 |                              |                      |           |
|---------------------------------|------------------------------|----------------------|-----------|
| <b>Packing</b>                  |                              |                      |           |
| <b>Net content</b>              | <b>25 kg</b>                 |                      |           |
| <b>Kind of packing</b>          | <b>Multi layer paper bag</b> |                      |           |
| <b>Packing size (L x W x H)</b> | <b>76*40*15</b>              |                      |           |
| <b>Packing/layer</b>            | <b>3</b>                     | <b>Layers/pallet</b> | <b>10</b> |

|                           |                                    |
|---------------------------|------------------------------------|
| <b>Shelf life</b>         |                                    |
| <b>Storage conditions</b> | <b>Cool and dry in closed bags</b> |
| <b>Maximum shelf life</b> | <b>12 months after production</b>  |

| Nutritional values (per 100 gram) |   | (from USDA Database)  |
|-----------------------------------|---|---|
| Energy                            | 1498 KJ<br>358 Kcal                                     |   |
| Protein (g)                       | 0.19  |   |
| Fat (g)                           | 0.02  | Saturated: 0.01<br>Mono-unsaturated: 0.01<br>Poly-unsaturated: 0.00 |
| Carbohydrates (g)                 | 88.69   | Sugars: 3.35<br>Poly-saccharides: min 85 %                          |
| Dietary fibre (g)                 | 0.9   |   |
| Moisture (g)                      | max 13%   |   |
| Mineral (mg)                      | Calcium (Ca): 20<br>Iron (Fe): 1.58<br>Potassium(K): 11 | Sodium (Na): 1<br>Phosphor (P): 7<br>Magnesium (Mg): 1              |
| Vitamins (mg)                     | Vitamin A: IU/RE<br>Vitamin B1:<br>Vitamin B2:          | Niacin:<br>Vitamin B6:<br>Vitamin C:                                |

| Analytical properties |  |
|-----------------------|--|
| Ashes (%)             | 0,2  |
| pH                    | 5 – 7  |
| Gelatinize period     | From 60°C to 65°C  |
| Viscosity (B.U.)      | 550 min (40 – 95°C, 6% starch solution by Brabender Viscograph (700 cmg, plate type) |
| Foreign Matter %      | Max. 0,2   |

| Microbiological Properties |           |
|----------------------------|-----------|
| Total Plate Count (cfu/g)  | < 100.000 |
| Yeast & moulds (cfu/g)     | < 1.000   |
| Bacillus Cereus (cfu/g)    | < 5.000   |
| Coliforme (cfu/g)          | < 10      |
| E.Coli (cfu/g)             | < 10      |
| St. Aureus (cfu/g)         | < 10      |
| Salmonella (cfu/25g)       | Absent    |

| <b>Allergy list (+ = present, - = absent and ? = unknown * possible cross contamination)</b> |   |  |
|--|---|--|
| Cow's milk protein   | - | Peanuts/groundnuts (-derivatives) -                                      |
| Lactose or milk sugar  | - | Peanutoil -  |
| (Chicken) egg  | - | Sesame -   |
| Soya protein (-derivatives)  | - | Sesame-oil -   |
| Soya oil   | - | Glutamate (added E620-E625) -  |
| Gluten   | - | Sulfite (E220-E228) -  |
| Wheat  | - | Benzoic acid/Parabens (E210-E213) -                                      |
| Rye  | - | Azo-colours E102, E110, E122, E123, E124, E128, E129, E151, E154, E155 - |
| Beef (-derivatives)  | - | Tartrazine (E102) -  |
| Pork (-derivatives)  | - | Cinnamon -   |
| Chicken (-derivatives)   | - | Vanillin -   |
| Fish   | - | Coriander -  |
| Shell-fish   | - | Celery -   |
| Corn /Maize (-derivatives)   | - | Umbelliferae -   |
| Cocoa  | - | Carrot -   |
| Yeast  | - | Lupine -   |
| Pulses   | - | Mustard -  |
| Nuts (-derivates)  | - | Mollusc (- derivates ) -   |
| Nut-oil  | - |  |

| <b>Acceptable for:</b> |     |
|------------------------|-----|
| Vegetarians            | Yes |
| Vegans                 | Yes |
| Lacto-vegetarians      | Yes |
| Kosher-certified       | Yes |
| Halal-certified        | Yes |
| NOP-certified          | Yes |
| Ecosocial              | No  |

|     |   |
|-----|---|
| Use | <b>Manioc starch/tapioca thickens translucent. It is used in soups and porridges.</b> |
|-----|---|