

## TECHNICAL DATA SHEET

### Product

Beta PE 4/1 – Food grade

### Characteristics

Botanical and supply-chain information

|                                   |                                                               |
|-----------------------------------|---------------------------------------------------------------|
| Botanical name                    | Beta vulgaris L.                                              |
| Family                            | Amaranthaceae                                                 |
| Plant part used                   | Root                                                          |
| CAS number                        | 89957-89-1                                                    |
| Growth conditions                 | Cultivated                                                    |
| Harvest period                    | Agosto-ottobre                                                |
| Harvest conditions                | Mechanical                                                    |
| Primary processing                | Harvesting, washing, drying                                   |
| Novel food                        | Out of the scope of Reg. (EU) 2015/2283                       |
| Use permitted in food supplements | Compliant with Italian Ministerial Decree 10/08/2018, Annex I |
| Plant origin                      | China                                                         |
| Raw material provenance           | China                                                         |

### Chemical and physical properties

Main technical specifications

|                    |                                    |
|--------------------|------------------------------------|
| TLC identification | Positive                           |
| Preparation type   | Dry extract — extraction ratio 4:1 |
| Extraction solvent | Alcohol and water                  |
| Carriers           | Maltodextrin max. 5.00%            |
| Appearance         | Fine red-brown powder              |
| Particle size      | 100.0% through 80-mesh sieve       |
| Moisture           | 5.0 % max                          |
| Ashes              | 5.0 % max                          |
| Bulk density       | 30-70 g/100ml                      |

## Contaminants

Main compliance (EU regulations)

|                                             |                                                                                                   |
|---------------------------------------------|---------------------------------------------------------------------------------------------------|
| <b>Pesticide residues</b>                   | Compliant with Reg. (EC) No. 396/2005                                                             |
| <b>Solvent residues</b>                     | Compliant with Dir. 2009/32/EC                                                                    |
| <b>Allergens</b>                            | Reg. (EU) No. 1169/2011, Annex II — Not present as intentional ingredients                        |
| <b>GMO</b>                                  | Absent — Reg. (EC) No. 1829/2003 and No. 1830/2003                                                |
| <b>Nickel</b>                               | Compliant with Reg. (EU) 2024/1987                                                                |
| <b>Ethylene oxide (EtO)</b>                 | Not used; EtO + 2-chloroethanol residues compliant with Reg. (EC) No. 396/2005                    |
| <b>Irradiation</b>                          | Not irradiated — Dir. 1999/2/EC and 1999/3/EC                                                     |
| <b>Radioactivity</b>                        | Within natural limits                                                                             |
| <b>BSE, TSE</b>                             | Product of plant origin; TSE/BSE risk not applicable (no ingredients of animal origin)            |
| <b>WADA list</b>                            | Does not contain substances on the current WADA list                                              |
| <b>Nanomaterials</b>                        | No 'engineered nanomaterials' as per Reg. (EU) 2015/2283                                          |
| <b>Total aerobic microbial count (TAMC)</b> | $\leq 1.0 \times 10^4$ CFU/g. Salmonella: absent in 25 g; E. coli and S. aureus: absent in 1 g    |
| <b>Total yeasts and moulds (TYMC)</b>       | $\leq 1.0 \times 10^3$ CFU/g                                                                      |
| <b>Other contaminants</b>                   | Compliant with Reg. (EU) 2023/915 (heavy metals, PAHs, mycotoxins, pyrrolizidine alkaloids, etc.) |

## Indications

Intended use and general information

|                                                  |                                                                       |
|--------------------------------------------------|-----------------------------------------------------------------------|
| <b>Physiological and health-related purposes</b> | Antiossidante. (Ministero Salute)                                     |
| <b>Contraindications, warnings, interactions</b> | Nessuno                                                               |
| <b>Toxicological data</b>                        | Nessuno                                                               |
| <b>Additional notes</b>                          | Nessuna                                                               |
| <b>Usage indications</b>                         | Exclusively plant-based origin; suitable for vegetarian and vegan use |
| <b>Storage</b>                                   | Store in a cool, dry place in original sealed packaging               |
| <b>Shelf life</b>                                | 3 years from production if properly stored                            |

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