



## Sunprotein

### Product Information

A general approach to cope with a deficit is to develop new sources of resources. New protein sources are developed to compensate protein deficit and to enhance nutritional value of food. Global demand for functional and personalized foodstuffs with high protein content is on the rise, resulting in the development of new, healthy protein sources.

Sunprotein is a sunflower protein concentrate with a high protein content (up to 83%) that contains a comprehensive set of amino acids. This product was developed through an innovative procedure and is free of GMOs\*, phytoestrogens, gluten, lactose and other allergens.

The main reasons to use Sunprotein in food products, especially in sports foods, are:

- High protein content (up to 83%)
- Free of GMOs\*, anti-nutritional factors, soy, lactose, gluten, aspartame
- Complete and balanced amino acid composition
- Suitable for vegetarian and kosher diets

Sunprotein has a light green colour, due to oxidation of small amount of chlorogenic acid present in the sunflower seeds. It serves as a natural dye, and the colour sets Sunprotein apart from other products.

Furthermore, pure chlorogenic acid is seen and used as a weight loss product. It blocks the release of glycogen during training and leads to faster fat burning. Bodybuilder/athlete diets are highly effective when combined with Sunprotein. Most bodybuilders strive towards pure muscle mass and definition and chlorogenic acid supplementation can effectively support this.



The product is produced from sunflower seeds at ecological mountain area Gorny Altai (Russia). As Russia is the worlds second-largest producer of sunflower seeds, the raw material for the product can be stably provided at low costs.

The product is certified according to ISO 22000:2005.

\*Genetically Modified Organism

| General properties of the sun protein:                                                         |                               |               |                |
|------------------------------------------------------------------------------------------------|-------------------------------|---------------|----------------|
| Smell                                                                                          | odorless                      |               |                |
| Colour                                                                                         | colour light green            |               |                |
| Taste                                                                                          | neutral to the taste          |               |                |
| Size                                                                                           | average particle size 20-25qm |               |                |
| Nutritional physiological characteristics and components in mass fractions (proportions vary): |                               | Amino acids   | g/100g protein |
| Protein, %                                                                                     | 82,5                          | Threonine     | 2,95           |
| Crude fiber, %                                                                                 | 0,1                           | Valine        | 4,58           |
| Fat, %                                                                                         | 4,6                           | Methionine    | 1,71           |
| Calcium, %                                                                                     | 0,19                          | Isoleucine    | 3,76           |
| Phosphorus, %                                                                                  | 0,52                          | Leucine       | 5,55           |
| Sodium chloride, %                                                                             | 0,06                          | Phenylalanine | 4,67           |
| Ash, %                                                                                         | 4,31                          | Lysine        | 6,53           |
| Suger after the inversion, %                                                                   | 3,4                           | Tryptophan    | 1,43           |
| Other nitrogen-free extractants, %                                                             | 0,3                           | Asparagine    | 8,61           |
| Moisture, %                                                                                    | 4,02                          | Serine        | 3,63           |
| Total                                                                                          | 100%                          | Glutamine     | 24,72          |
| Height of the pH, %                                                                            | 7-8                           | Proline       | 3,51           |
| NaCl, %                                                                                        | 0,11                          | Glycine       | 4,73           |
| Energy value                                                                                   | 2090kJ/499kcal                | Alanine       | 2,92           |
|                                                                                                |                               | Cystine       | 0,06           |
|                                                                                                |                               | Tyrosine      | 2,29           |
|                                                                                                |                               | Histidin      | 2,47           |
|                                                                                                |                               | Arginine      | 7,84           |
|                                                                                                |                               | Gesamt        | 91,92          |
|                                                                                                |                               | BCAA*         | 13,89          |

\*Genetically Modified Organism