

### 1. General information:

<b>Market designation:</b>	Colostrum 60%		
<b>Amount:</b>	15 kg		
<b>Product description:</b>	Skimmed, decaseinated, microfiltered, ultrafiltered, spray-dried skimmed powder of <i>Colostrum bovine</i> from first milking within the first 24 hours		
<b>Origin:</b>	Best cow farms in Europe		
<b>Sensory properties:</b>	<b>Appearance:</b>	White to yellow colored powder	
	<b>Taste:</b>	Like whey	
	<b>Odor:</b>	Like whey	
	<b>Texture:</b>	Fine granular powder	
<b>Shelf life:</b>	24 months from the production date (kept in closed, original packaging)		
<b>Packaging:</b>	15 kg double paper bags with polyethylene bag inside		
<b>Storage conditions:</b>	Dry and dark place, temperature below 25°C, humidity below 65%		

### 2. Application:

<b>Target group:</b>	Generally suitable for consumption except for people allergic to <b>milk</b> products.
<b>Dose:</b>	Colostrum-skimmed powder is milk and water-soluble. It is suitable to add into liquid food and beverages. It can be also used for tablets or capsules application.

### 3. Nutrition value:

Energy or nutrient	Value [per 100 g]	Method
Energy [kJ/kcal]	1495 / 357	Calculated regulation (EC) No 1169/2011
Fat [g]	≤ 0,5	PN-ISO 488:2010
Saturated fatty acids [g]	≤ 0,5	PN-ISO 16958:2018-08
Carbohydrates [g]	1,0	PN-A-74108:1996
Sugar [g]	1,0	PN-A-74108:1996
Protein [g] (casein [g])	87 (10)	PN-EN ISO 8968-1:2014-03
Salt [g]	0,31	PN-A-74108:1996

#### 4. Chemical parameters:

Component	Value [per 100 g]	Method
Antibiotics	Negative	Eclipsa 50
Immunoglobulin G (IgG) [g/L]	≥ 60,0	RID
Insulin Growth Factor (Type 1) [μg/g]	3,8 – 5,8	ELISA (dry basis)
Proline-Rich Polypeptides (PRPs)* [g]	7,0 – 7,5	LC-MS/MS
Lactoferrin [g]	1,8 – 2,0	ELISA (dry basis)
Lactose [g]	0,5 – 2,0	HPLC
Ashes [g]	1,5 – 4,0	PN-EN ISO 2171:2010

\*PRP content estimated by calculation of amino-acids (Pro and Val) ratios based on research and bibliographic data (Kruzel 2004, The Protein Journal). Amino-acids measurements were performed using high performance liquid chromatography coupled with tandem mass spectrometry

#### 5. Physical properties:

	Value [per 100 g]	Method
Moisture [%]	≤ 5,0	PN-A-79011-3:1998
pH	5,5 – 6,7	10% solution, 20°C
Tapped Bulk Density [g/L]	≤ 400	PN-EN 1097– 3:2000

#### 6. Microbiological parameters:

	Value	Method
<i>Listeria monocytogenes</i>	Negative in 25 g	PN-EN ISO 11290-1:2017-07
<i>Salmonella</i> spp.[cfu/g]	Negative in 25 g	PN-EN ISO 6579:2003
<i>Staphylococcus aureus</i> [cfu/g]	<1,0 x 10 <sup>2</sup>	PN-EN ISO 6888-2:2001+A1:2004
<i>Escherichia coli</i> [cfu/g]	< 1,0 x 10 <sup>2</sup>	ISO 16649-1
<i>Enterobacteriaceae</i> [cfu/g]	<1,0 x 10 <sup>2</sup>	PN ISO 21528-2:2017-08
Yeast / mold [cfu/g]	≤ 1,0 x 10 <sup>2</sup>	PN-ISO 21527-2:2009
Aerobic Plate Count [cfu/g]	≤ 1,0 x 10 <sup>4</sup>	PN-EN ISO 4833-1:2013-12

## 7. Allergens (Annex II of Regulation (EU) No 1169/2011)

	YES	NO
Cereals containing gluten (i.e. wheat, rye, barley, oats, spelt, kamut or their hybrid strains) and products thereof		X
Crustaceans and products thereof		X
Eggs and products thereof		X
Fish and products thereof		X
Peanuts and products thereof		X
Soybeans and products thereof		X
Milk and products thereof (including lactose)	X	
Nuts (i.e. almond, hazelnut, walnut, pecan nuts, Brazil nuts, pistachio, macademia or Queensland nuts) and products thereof		X
Celery and products thereof		X
Mustard and products thereof		X
Sesame seeds and products thereof		X
Sulfites (E220 – 228) and sulfur dioxide ( $\geq 10$ ppm SO <sub>2</sub> )		X
Lupine and products thereof		X
Molluscs and products thereof		X

## 8. GMO status:

Colostrum whey concentrated powder comply with (EC) No 1829/2003, 1830/2003 and 654/2004, furthermore GMO labeling is not required.

## 9. Further information on the product:

- Colostrum whey concentrated powder is a natural product and may vary.
- Packaging complies with Regulation (EC) No 1935/2004, 2023/2006 and 10/2011.
- The data included in this specification is based on present regulations, knowledge and latest research.