	<b>PRODUCT SPECIFICATION</b>
	<b>SF 100</b> <i>POWDERED SUNFLOWER LECITHIN 100, E322</i>
Specification No 01/SF100	

### 1. Description

Powdered Sunflower Lecithin SF 100 is a mixture of sunflower phosphatides obtained by physical procedures from vegetable foodstuffs – from sunflower lecithin liquid.

### 2. Country of origin

Poland

### 3. Product specification

#### 3.1. Sensory properties

No	Parameter	Properties
1	Consistency	Homogenous, free flowing powder, acceptable easily crumbled lumps
2	Taste, smel	Typical without off-tastes and off-flavours
3	Colour	Yellow-grey to light straw

#### 3.2. Chemical and physical properties

No	Parameter	Properties
1	Loss on drying (110°C)	max 2,0 %
2	Peroxide value	max 10 meq O <sub>2</sub> /kg
3	Acid value	max 35 mg KOH/g
4	Acetone insoluble, phospholipids	min 96,0%
5	Toluene insoluble	max 0,3%
6	Heavy metal	
	Arsenic (As)	≤ 3 mg/kg
	Lead (Pb)	≤ 2 mg/kg
	Mercury (Hg)	≤ 1 mg/kg

#### 3.3. Microbiological properties


No.	Parameter	Properties
1	Total plate count	Max 3 x10 <sup>3</sup> (1g)
2	Escherichia coli	Absent (1g)
3	Salmonella	Absent (25 g)
4	Moulds	Max 1 x10 <sup>2</sup> (1g)
5	Yeast	Max 1 x10 <sup>2</sup> (1g)

### 4. Contaminants

The product is in accordance to the requirements of the Regulation (EC) No 231/2012 laying down specifications for food additives listed in Annexes II and III to Regulation (EC) No 1333/2008 along with amendments.

### 5. GMO status

According to Commission Regulation no 1829/2003 and 1830/2003 and current legislation, the product does not require labeling, because the raw material is obtained from conventional non GMO- sunflower kernels.

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## 6. Radiation

The product and its ingredients is not treated with ionizing radiation.

## 7. Allergen information

The allergen list is based on Annex II of Regulation (EU) 1169/2011 from 25-th October 2011 along with amendments.

No.	Allergens	Present in product (Yes/No)	Cross contamination (Yes/No)
1	Cereals containing gluten, namely: wheat (such as spelt and khorasan wheat), rye, barley, oats or their hybridised strains, and products thereof, except: (a) wheat based glucose syrups including dextrose (1); (b) wheat based maltodextrins <sup>(1)</sup> ; (c) glucose syrups based on barley; (d) cereals used for making alcoholic distillates including ethyl alcohol of agricultural origin;	No	No
2	Crustaceans and products thereof;	No	No
3	Eggs and products thereof;	No	No
4	Fish and products thereof;	No	No
5	Peanuts and products thereof;	No	No
6	Soybeans and products thereof;	No	No
7	Milk and products thereof (including lactose);	No	No
8	Nuts i.e. almond ( <i>Amygdalus communis</i> L.), hazelnut ( <i>Corylus avellana</i> ), walnut ( <i>Juglans regia</i> ), cashew ( <i>Anacardium occidentale</i> ), pecan nut ( <i>Carya illinoensis</i> (Wangenh.) K. Koch), Brazil nut ( <i>Bertholletia excelsa</i> ), pistachio nut ( <i>Pistacia vera</i> ), macadamia nut and Queensland nut ( <i>Macadamia ternifolia</i> ), and products thereof;	No	No
9	Celery and products thereof;	No	No
10	Mustard and products thereof;	No	No
11	Seeds and products thereof (i.e. sesame seed, cotton seed, poppy seed, sunflower seed);	No	No
12	Sulphur dioxide and sulphites at concentrations of more than 10mg/kg or 10mg/litre expressed as Sulphur dioxide;	No	No
13	Lipin and products thereof;	No	No
14	Molluscs and products thereof;	No	No

<sup>(1)</sup> And the products thereof, in so far as the process that they have undergone is not likely to increase the level of allergenicity assessed by the Authority for the relevant product from which they originated.

## 8. Package

Product is packed in cartons or in paper bags with HDPE bags. Weight 20kg.

## 9. Storage

Product should be stored in dry, clean and light warehouse, in temperature 5-35°C and humidity max 75%. After opening use immediately or reclose it against contact with environment.

## 10. Shelf life


Shelf life – 18 months from the production date in originally packing.

## 11. Functionality

Product is dispersible in water, soluble in oils, partially soluble in ethanol.

## 12. Application

Product is developed for use in food industry and especially in bakery and confectionery products. It is used also in diet supplements.

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The information contained herein is believed to be true and accurate. We accordingly also exclude all liability in connection with the purchaser's/user's use of the products or the information referred to herein. All such risks are assumed by the purchaser's/user's.