

## Potato Flakes Specification

(Ref. No 10.31.13-006-25723337-2018)

### Raw materials and additives:

row potatoes for processing dry matter 19-23%	> 99.2%
emulsifier - monoglycerides and diglycerides (E 471)	< 0.8%
stabilizers - disodium pyrophosphate (E 450)	
antioxidants ascorbyl palmitate (E 304)	
ascorbic acid (E 300)	
sodium metabisulfite (E 223)	
turmeric (E 100)	

### Organoleptic factors:

Table 1

Factor	Description
Form of flakes	Dry loose pieces of flakes not sticked together
Color	White, yellow, cream-coloured
Odour	Characteristic for mashed potatoes
Consistency	Homogeneous, characteristic for mashed potatoes without stickiness

### Physical factors

Table 2

Factor	Description
Maximum size of flakes, mm	
regular flakes	6,5
grinded flakes	3,5
Weight per liter, grams	
regular flakes	200-240
grinded flakes	310-330
Maximum humidity, %	8,0
Maximum mass concentration of sulfur dioxide, %	0,008
Maximum mass concentration of mineral admixtures, %	0,01
Maximum mass concentration of metal admixtures, %	0,0003

### Microbiological factors

Table 3

Factor	Description
Quantity of mesophilic bacteria and facultatively-anaerobic microbes, CFU/g, less then	$5 \cdot 10^4$
Weight of product, g, that excludes:	
- colibacillus	0,1
- pathogenic bacteria, including salmonellae	25
Mold, CFU/g, less then	$5 \cdot 10^2$

## Content of toxical elements, nitrates, pesticides and radionuclides

Table 4

Name of substance (element)		Maximum allowable impurity level, mg/kg, (for radionuclide – Bq/kg)
	Plumbum	0,5
	Arsenic	0,2
Toxic elements	Cadmium	0,03
	Mercury	0,02
Nitrates		250
Pesticides	Hexachlorocyclohexane - isomers)	0,1
	Dichlorodiphenyltrichloroethane and its metabolites	0,1
Radionuclide	Cesium-137	600
	Strontium-90	200

### Packaging, storage and transport

Kraft-paper bags (3-4 layers) with polyethylene layer inside. Weight 5 – 25 kg.  
 Big-bags. Weight 500 — 1000 kg.  
 Expiry period 12 months.

### Storage conditions

Cool, dry place to comply with hygiene and sanitary conditions.

Transport conditions:

According to transport regulations for dry food products.

### Labelling

label information:

- name of producer
- address of producer
- name of product
- net weight
- storage conditions
- expiry period
- shift number
- production date

### Nutrition facts

100 g of product contains:

Energy - 340 Calories (1440 kJ);

Protein – 7,5 g;

Fats – 0.5 g;

Total Carbohydrates – 76 g:

Starch – 70.6 g;

Sugars – 3.4 g.

Dietary fiber – 4,6 g;

Ash – 3.5 g

### Preparation

To prepare mash add 500-700 ml of water per 100 g of flakes (depending on consistency required) or 300 – 500 of water and 200 ml of cold milk ( Maximum water or mix temp. 75<sup>0</sup> C).

### Accompanying documents

Declaration of conformity, phytosanitary certificate.

### Inspection methods and regulations

Inspection	Regulation norms
Row potato test	GOST 7194
Sampling preparation	GOST 28741, GOST 26668, GOST 26670, GOST 26929.
Organoleptic criteria	GOST 28741
Humidity test	GOST 15113.4,GOST 33977.
Mass concentration of sulfur dioxide	GOST 25555.5
Mass concentration of mineral admixtures	GOST ISO 762
Mass concentration of metal admixtures	GOST 13340.2, GOST 15113.2, GOST 34130.
Toxic elements content	GOST 26927, GOST 26930, GOST 26932, GOST 26933, GOST 30178, GOST 30538, GOST 31628, GOST 33824,GOST 51766,GOST 54638, GOST 56931.
Nitrate content	GOST 29270.
Pesticides content	GOST 30349.
Radionuclide content	GOST 32161; GOST 32163.
Mesophilic bacteria and facultatively-anaerobic microbes content	GOST 10444.15.
Colibacillus content	GOST 31747
Pathogenic bacteria, including salmonellae content	GOST R 31659
Mold content	GOST 10444.12.