Potato Industry Company



PRODUCT SPECIFICATION

MALTODEXTRIN

"Low-saccharified", "Medium-saccharified", "High-saccharified"

The edition number 7 from the March 23, 2020 replacing edition number 6 from the January 13, 2017.

1. PRODUCT CHARACTERISTICS

Maltodextrin is an enzymatic product of aqueous potato starch suspension depolymerisation intended for consumption purposes.

Maltodextrin is a composition consisting of polysaccharides (approximately 30-70% of the maltose) and oligosaccharides.

- 1.1. Product division depending on the hydrolysis degree of used starch the following maltodextrin types are being distinguished:
 - low-saccharified N
 - medium-saccharified S
 - high-saccharified W

2. MATERIAL COMPOSITION

- Potato starch,
- Enzymes liquid preparation α-amylase hydrolyzing potato starch.

3. QUALITY REQUIREMENTS

3.1. Physico-chemical parameters.

Properties	Quality parameters			Tests method	
Maltodextrin	L	M	Н		
Form	friable powder		er	TJ.6	
Colour	white to slightly creamy		creamy	TJ.6	
Flavour	sweetish to sweet		veet	ZN-A/16-2002/M-2	
Odour	typical for maltodextrins			ZN-A/16-2002/M-2	
Water-solubility	complete			TJ.6	
Mechanical impurities	non-allowable			ZN-A/05-2002/S-4	
Moisture content %, not more than	max.10			ZN-A/18-2002/M-4	
Ash content in dry matter %, not more than	0,2 ÷ 0,4			PN-EN ISO 3593:2000	
pH value	5 ÷ 7			ZN-A/19-2002/M-5	
Reducing saccharide content in dry matter converted to glucose (DE – dextrose equivalent)	5 ÷ 11	11 ÷ 20	20 ÷30	ZN-A/20-2002/M-6	
Acid-insoluble mineral content (in 10% hydrochloric acid)(in %)	0,1			ZN-A/09-2002/S-8	

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Content of metals in mg/kg:		
Arsenic (As)	less than 0,100	PN-EN 15763:2010
Lead (Pb)	less than 0,100	PN-EN 15763:2010
Zinc (Zn)	less than 0,80	PB-232/ICP, ed. II of 12.01. 2015
Cadmium (Cd)	less than 0,01	PN-EN 15763:2010
Mercury (Hg)	less than 0,01	PB-30/CVAAS, ed. V of 18.09.2015
Copper (Cu)	less than 0,30	PB-232/ICP, ed. II of 12.01.2015
Iron (Fe)	less than 8,0	PB-232/ICP, ed. II of 12.01.2015

3.2. Microbiological parameters.

Features	Quality parameters	Test method
Total aerobic bacteria count per 1 g	less than 10-1000 cfu	PN-EN
Total aerobic bacteria count por 1 g		ISO 4833-2:2013-12
Total yeast count per 1 g	no more than 50 cfu	PN-ISO 21527-2:2009
Total mould count per 1 g	no more than 50 cfu	PN-ISO 21527-2:2009
Bacillus cereus count per 1 g	no more than 10 cfu	PN-EN ISO 7932:2005
Coli group bacteria	no more than 10 cfu	PN-ISO 4832:2007
Escherichia coli per 1 g	absent	PN-ISO 7251:2006
Coagulase-positive staphylococci per 1 g	absent	PN-EN ISO 6888-3:2004+AC:2005
Salmonella per 25 g	absent	PN-EN ISO 6579-1:2017-04
Anaerobic sulphite reducing bacilli per 1 g	absent	PN-A-75052-10:1990
Enterobacteriaceae per 1 g	no more than 10 cfu	PN-EN ISO 21528-2:2017-08

4. NUTRITION VALUE IN 100 GRAM OF PRODUCT

Nutrition value - 400 kcal (1680 kJ)

5. GMO AND ALLERGENS STATEMENT

Maltodextrin does not contain allergens.

Maltodextrin has Non - GMO status and is produced from no genetically modified sources.

6. CONSUMER USE

It is a component of all types of pomades and interleaves in confectionery products protecting them against sugar hardening and crystallisation; prolongs the freshness of pastry goods and bakery products; stabilises mayonnaise consistency; used for tablet coating or as a component of nutritional and refreshing beverages; a sweetener for diabetics, in dietetic products, as a carrier in colorant; fragrance and juice drying, in production of processed; cured and/or smoked meat products; frozen cream;, ice-cream powder, soups, sauces, etc. Due to their filling thickening and stabilising properties, maltodextrin find application in production of baby food (modified milk and as component of baby foods).

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7. PACKAGING

Paper multilayer valve bags, 15 and 20 kg, placed of Euro-palettes, as well as other packaging as agreed upon with purchaser. All packaging being in use has PZH (National Institute of Public Health – National Institute of Hygiene) food contact approval certificates.

Packaging marking contains the following information:

- a) name and address of manufacturer
- b) product markings according to Section 1.1
- c) product net weight
- d) identification code according the following pattern: palette number / bag number / work party
- e) production date
- f) minimum durability date, proceeded by the following words: best used before the end of ..., followed by day, month and year
- g) storage conditions

8. STORAGE PERIOD AND CONDITIONS

Maltodextrin should be stored in dry, clean and airy rooms without foreign smell, with relative air humidity to 75% and temperature to 20°C.

The minimum storage period is 24 months from the production date.

9. TRANSPORT CONDITIONS

Transportation has to be well-kept and be in good technical condition protecting from contamination and assuring proper quality of goods in terms of health and especially protection from moisture.

10. DELIVERY DOCUMENT

Certificate of quality

All the information and data contained herein are based on our long-term experience and supported by scientific knowledge. However, this document is of informative nature only. Should you have any doubts we will be happy to provide you with detailed information and answer all your questions.

	Name and surname	Position	Date	Signature
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