



INTEGRATED MANAGEMENT
SYSTEM
Product Specification
MALTODEXTRIN DE 20

Cevizli Mah.Tugayyolu Cad. Ofisim Istanbul Plazaları No:20B/44-45 Maltepe Istanbul 34846
Phone: +90 539 573 73 03 E-

Issue date : 21.06.2021

Revision №3

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Product description
MALTODEXTRIN DE 20

Complies to the Food Chemical Codex and to the European / US Pharmacopeia monographs on Maltodextrin

Intended use	Intended for use as a carbohydrate component, structure-forming agent, forming agent, natural sweetener, sweetener regulator, stabilizer, neutral carrier of flavoring additives in various industries.
Production method	Partial starch cleavage product consisting of a multicomponent mixture of glucose, maltose, maltotriose and polysaccharides in various ratios.

Plant based product produced from corn grain not containing GMO

Nutrition value in 100 g of a product, not less	93/100 g
Carbohydrates, %, not less	93
Fats, %	0
Proteins, %	0
Energy value (calorific value) kcal / kJ per 100g maltodextrin, not less	372/1581
Composition	Maltodextrins 100%

Regulatory	GOST 34274-2017" Maltodextrin. Technical requirements"
Molecular Formula	$H(C H_{10} O)_n -OH$
EI N ECS	232-940-4
CAS number	9050-36-6
Appearance	Homogeneous free flowing fine powder, microgranules
Colour	White
Taste and odour	Peculiar to maltodextrins, without foreign taste and odor

PHYSICAL AND CHEMICAL SPECIFICATIONS

Parameter	Units	Typical value	Method of analysis
Moisture, no more than	%	6.0	Determination of loss in mass on drying (130°C / 5 g / 1,5 h) (Ref. ISO 1666:1996)



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Dextrose Equivalent (Lane-Eynon method), no more than	%	18.0-20.0	Titrimetry, Lane-Eynon method (Ref. ISO 5377:1981)
Sulphated Ash Content, %, no more than	%	0.20	weighing of residuals from burning a weighed portion of maltodextrin in muffle oven at 550 °C (+H ₂ SO ₄) (Ref. ISO5809:1981)
Bulk density (loose)	kg/dm ³	0.45 - 0.60	Internal method (Product weight in 1dm ³ in free state)
		not less than 0.65	Internal method (Product weight in 1dm ³ in a packed state by shaking)
Sulphur dioxide content (SO ₂), no more than	mg/kg	10.0	Iodometry (Oxidation of sulfurous acid in a 50 % solution of maltodextrin in the presence of a starch indicator)
Solubility, not less than	%	98.0	Internal method (Dissolving 50 g of maltodextrin in 100 g hot water)
pH value	pH units	4.5-6.0	pH-metry 40 % solution of maltodextrin
Particles size: Residue on sieve 200 µm, not more	%	5.0	Granulometry
Particles size: Residue on sieve 40 µm, not less than	%	90.0	Granulometry
Carbohydrate composition (in DS) /			
Glucose (DP ₁)	%	Not more 2.0	HPLC (Ref. ISO 10504)
Maltose (DP ₂)	%	Not more 7.0	HPLC (Ref. ISO 10504)
Maltotriose(DP ₃)	%	Not more 10.0	HPLC (Ref. ISO 10504)
Higher sugars (DP ₄₊)	%	On balance	HPLC (Ref. ISO 10504)
FOOD SAFETY PARAMETERS			

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Microbiological limits /

Total Aerobic and Anaerobic Microbial Count, no more than	CFU/g	1x10 ⁴	Ref. ISO 4833
Yeast, no more than	CFU/g	50,0	Ref. ISO 7954
Molds, no more than	CFU/g	100,0	Ref. ISO 7954
Coliforms	CFU/1,0 g	not allowed	Ref. ISO 4831, ISO 4832
Pathogenic microbes including Salmonella	CFU/25 g	not allowed	Ref. EN ISO 6579-1 ISO 6579-1

Content of Heavy Metal (mg/kg), no more than:

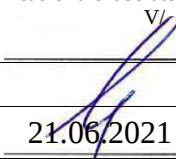
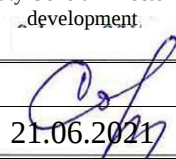
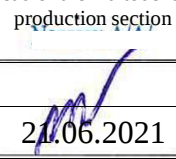
Lead (Pb)	0.50	Atomic absorptive method (mineralization and determination with atomic absorptive spectrometer)
Cadmium (Cd)	0.10	
Arsenic (As)	0.50	
Mercury (Hg)	0.02	

Content of GMO (PCR Real - Time)

Genetically Modified Organisms	not allowed	PCR Real - Time (Ref. ISO 21569, ISO 21571)
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Shelf life is 2 years.
Maltodextrin must be stored at relative humidity not exceeding 75 %.

Standard packing - 25 kg paper bags with PE lining

Name and position	Issued by	Approved by	Approved by
	Head of the laboratory V/	Deputy General Director for development	Head of the maltodextrin production section
Signature			
Date	21.06.2021	21.06.2021	21.06.2021