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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 20882.6-2021

Replacing GB/T 20884-2007

Quality requirements for starch sugars - Part 6: Maltodextrin

淀粉糖质量要求 第6部分：麦芽糊精

Issued on: December 31, 2021 **Implemented on: July 1, 2022**

Issued by: State Administration for Market Regulation;
Standardization Administration of China

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Foreword

This document is in accordance with the provisions of GB/T 1:1-2020 "Guidelines for Standardization Work Part 1: Structure and Drafting Rules of Standardization Documents" drafted: This document is one of the series of standards "Quality Requirements for Starch Sugar": The following parts of this series of standards have been published:

---GB/T 20880 Edible glucose;

2 Quality Requirements for Starch Sugar Part 2: Glucose Syrup (Powder);

3 Quality Requirements for Starch Sugar Part 3: Crystalline Fructose, Solid Fructose;

4 Quality Requirements for Starch Sugar Part 4: Fructose Syrup;

6 Starch sugar quality requirements Part 6: Maltodextrin: This document replaces GB/T 20884-2007 "Maltodextrin": Compared with GB/T 20884-2007, the main technical changes are as follows:

--- Changed the definition of maltodextrin (see 3:1, 3:1 of the:2007 edition);

--- Added the classification, requirements and corresponding test methods of liquid products (see 4:1, Chapter 5, 6:3, 6:5, 6:6);

--- Delete the physical and chemical requirements, test methods and inspection requirements of the iodine test (see 5:2, 6:7, 7:3 of the:2007 edition);

--- Changed the physical and chemical requirements for DE value, pH, and sulfated ash (see 5:2, 5:2 of the:2007 edition): Please note that some content of this document may be patented: The issuing agency of this document assumes no responsibility for identifying patents: This document is proposed and managed by the National Standardization Technical Committee of Food Industry (SAC/TC64): This document is drafted by: Luzhou Biotechnology (Shandong) Co:, Ltd:, Xiwang Group Co:, Ltd:, Guangzhou Shuangqiao Co:, Ltd:, Qinhuang Dao Lihua Starch Co:, Ltd:, Shandong Fuxin Biotechnology Co:, Ltd:, Anhui Fengyuan Fermentation Technology Engineering Research Co:, Ltd:, Bao Lingbao

Biological Co:, Ltd:, Shandong Lvjian Biotechnology Co:, Ltd:, Liangshan Linghua Biotechnology Co:, Ltd:, Cargill Investment (China) have Co:, Ltd:, Roquette (China) Fine Chemicals Co:, Ltd:, Perfect (China) Co:, Ltd:, Ingredion Food Ingredients Co:, Ltd:, Tailai Trading (Shanghai) Co:, Ltd:, China Food and Fermentation Industry Research Institute Co:, Ltd: The main drafters of this document: Liu Ming, Pan Shenglong, Zhao Yubin, Sun Xueqian, Xu Zhengkang, Zhang Xuefeng, Ru Caiyou, Li Peigong, Hao Jingfeng, Zhang Xiaoxia, Man Deen, Wang Qiongfang, Zhao Jingbo, Hou Xijuan, Wang Liang, Hu Ruilian, Yu Qin, Zhang Fengxia, Liu Jie, Wang Lingyun, Bian Jiang: The previous versions of this document and its superseded documents are as follows:

---The first released version in:2007 is GB/T 20884-2007;

---This is the first revision:

With the rapid development of the food fermentation industry, the types of starch sugars have been diversified, and the product quality has been improved to a new level: There has been considerable development and progress in technology and categories: The formulation of GB/T 20882 "Quality Requirements for Starch Sugar" is the product quality of starch sugar: The standardization and standardization of testing methods are the basic work to standardize the industry order of starch sugar and its related products and promote the development of the industry: GB/T 20882 "Quality Requirements for Starch Sugar" is proposed to consist of seven parts:

--- Part 1: Edible glucose;

1 Scope

China's national quality requirements for maltodextrin. It is Part 6 of GB/T 20882 and specifies the terms and definitions, the product classification, the requirements, the test methods, the inspection rules, and the marking, packaging, transport and storage, and it applies to the production, inspection and sale of maltodextrin. Maltodextrin is starch hydrolysed part of the way and then stopped. Taken further it becomes glucose syrup and eventually glucose; stopped early it remains a mixture of oligosaccharides that is barely sweet, dissolves readily, and behaves as a bulking agent and a carrier rather than as a sugar. That is precisely what makes it one of the most widely used food ingredients in existence and one of the least visible: it is the body in a low-fat product, the carrier that turns a flavour or a colour into a free-flowing powder, the wall material in spray-dried encapsulation, the filler in a tablet, the bulk in an infant formula and a sports drink, and the agent that stops a powder caking. The single number that describes it is the dextrose equivalent, the measure of how far the hydrolysis went, and everything else follows from it - the viscosity, the solubility, the hygroscopicity, the sweetness and the browning behaviour all change monotonically with DE. So the classification is by DE range, and the standard fixes the DE determination together with the requirements a buyer needs: the moisture, since a low-DE powder is hygroscopic and moisture makes it cake; the ash and the pH; the

transmittance and the sensory characteristics; the sulfur dioxide residue from the processing; and the microbiological limits. Issued on 31 December 2021 and in force since 1 July 2022, it replaces GB/T 20884-2007.

This document specifies the quality requirements for maltodextrin, including terms and definitions, product classification, requirements, test methods, inspection rules and signs, Packaging, transportation and storage: This document applies to the production, inspection and sale of maltodextrin:

2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text: Among them, dated citations documents, only the version corresponding to that date applies to this document; for undated references, the latest edition (including all amendments) applies to this document:

GB/T 191 Graphical signs of packaging, storage and transportation Preparation of

GB/T 601 Standard Titration Solutions for Chemical Reagents

GB/T 602 Preparation of standard solutions for the determination of impurities in chemical reagents Preparation of preparations and products used in

GB/T 603 chemical reagent test methods

GB 5009:3-2016 National Food Safety Standard for Determination of Moisture in Food

GB/T 6682 Analysis Laboratory Water Specifications and Test Methods

3 Terms and Definitions

The following terms and definitions apply to this document: 3:1 maltodextrin;MD Saccharide polymers prepared from starch or starch as raw materials, through low-level enzymatic hydrolysis, purification, drying or non-drying:

4 Product categories

1 According to the product form, it is divided into solid products and liquid products: 4:

2 According to the glucose equivalent (DE value), it is divided into MD10, MD15 and MD20:

5 Requirements

1 Sensory requirements Should comply with the provisions of Table 1: