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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 23528.3-2025

Replacing GB/T 35545-2017

**Quality requirements for oligosaccharides - Part 3:
Xylo-oligosaccharides**

低聚糖质量要求 第3部分：低聚木糖

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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 for standardization documents" Drafting.

This document is Part 3 of GB/T 23528 "Quality requirements for oligosaccharides". GB/T 23528 has been published in the following parts.

- Part 1: General;
- Part 2: Fructooligosaccharides;
- Part 3: Xylo-oligosaccharides;
- Part 4: Isomaltooligosaccharides.

This document replaces GB/T 35545-2017 "Xylooligosaccharides". Compared with GB/T 35545-2017, except for structural adjustments and editorial changes, In addition to the above, the main technical changes are as follows.

- Changed the scope of application (see Chapter 1, Chapter 1 of the 2017 edition);
- Deleted the classification and requirements of XOS-20 (see 6.2 and 7.3 of the 2017 edition);
- Added requirements for auxiliary material maltodextrin (see 7.1);
- Changed the color requirements of syrup and powdered sugar and the appearance requirements of powdered sugar (see 7.2, 7.2 of the 2017 edition);
- Deleted the hygiene requirements and corresponding test methods (see 7.4 and 8.9 of the 2017 edition);

- Changed the relevant requirements for sensory testing (see 8.2, 8.1 of the 2017 edition);
- The test methods for dry matter, transmittance and pH have been changed (see 8.3, 8.6 and 8.7, 8.2, 8.5 and 8.6 of the 2017 edition);
- The test method for XOS content has been changed (see 8.8, Appendix A and Appendix B, 8.7, Appendix A and Appendix B of the 2017 edition);
- Changed the inspection rules (see Chapter 9, Chapter 9 of the 2017 edition);
- Changed the marking, packaging, transportation and storage (see Chapter 10, Chapter 10 of the 2017 edition).

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document was proposed and coordinated by the National Food Industry Standardization Technical Committee (SAC/TC64).

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The previous versions of this document and the documents it replaces are as follows.

- First published in 2017 as GB/T 35545-2017;
- This is the first revision.

Introduction

With the rapid development of food fermentation industry, oligosaccharide types have diversified, product quality has been improved, and product varieties have been enriched.

The industry has made great progress in technology and development. GB/T 23528 "Quality Requirements for Oligosaccharides" was formulated to improve the product quality and The normalization and standardization of detection methods is the basic work to regulate the industry order of oligosaccharides and related products and promote industrial development.

GB/T 23528 "Quality Requirements for Oligosaccharides" is planned to consist of four parts.

- Part 1: General. The purpose is to improve the product quality of the oligosaccharide industry.
- Part 2: Oligofructose. The purpose is to improve the product quality of the oligofructose industry.
- Part 3: Xylo-oligosaccharides. The purpose is to improve the product quality of the xylo-oligosaccharides industry.
- Part 4: Isomaltooligosaccharides. The purpose is to improve the product quality of the isomaltooligosaccharides industry.

Oligosaccharide quality requirements Part 3: Xylo-oligosaccharides

1 Scope

This document specifies the technical requirements, inspection rules and marking, packaging, transportation and storage requirements of xylooligosaccharides, and describes the corresponding test methods.

The method provides information on molecular formula, structural formula, symbol and product classification.

This document applies to products made from corn cobs and/or corn stalks, using steam explosion or high pressure cooking, and then refined by enzymatic hydrolysis.

Production, inspection and sales of xylo-oligosaccharides.

2 Normative references

GB/T 191

GB 5009.3-2016

GB 5009.4

GB/T 6682

GB/T 20882.2

GB/T 20882.6

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Xylo-oligosaccharides; XOS

A mixture of oligosaccharides composed of 2 to 9 xylose units connected by beta-1,4

glycosidic bonds.

4.1 Structural formula

The structural formula of xylo-oligosaccharide is shown in Figure 1.

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