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

GB/T 23527.3-2025

Replacing GB/T 24401-2009

**Quality requirements for enzyme preparations - Part 3: Amylase
preparations**

酶制剂质量要求 第3部分：淀粉酶制剂

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Standardization Administration of the PRC**

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents". Drafting. This document specifies the technical requirements related to food quality. For food safety requirements, please refer to relevant laws, regulations, policies, and food safety standards. document. This document is Part 3 of GB/T 23527 "Quality Requirements for Enzyme Preparations". GB/T 23527 has already published the following parts.

1. Protease Preparations;

2. Lipase Preparations;

3. Amylase Preparations;

4. Immobilized glucose isomerase preparations. This document replaces GB/T 24401-2009 "alpha-Amylase Preparations". Compared with GB/T 24401-2009, the only changes are structural adjustments and editing. Aside from the sexual alterations, the main technical changes are as follows:

a) The applicable boundaries of the scope have been changed (Chapter 1, Chapter 1 of the.2009 edition);

b) Added "beta-amylase", "alpha-amylase preparation", "beta-amylase preparation", "alpha-amylase activity unit", and "beta-amylase activity unit". The terms and definitions of "alpha-amylase activity" and "beta-amylase activity" are provided in sections 3.2-

3.5 and 3.8-3.10.

c) The requirements for product classification have been changed (see 4.1, 4.2, 4.1, 4.2 in the.2009 version);

d) The physical and chemical requirements have been revised (see 5.2,.2009 edition), and the hygiene requirements have been removed (see 5.3,.2009 edition);

e) A test method for fineness has been added (see 6.4);

f) The content of factory inspection and type inspection has been changed (see 7.3, 7.4, and 7.3,

1 Scope

GB/T 23527.3-2025 is the Chinese national standard covering industrial amylase - the activity assay and the units it is sold in, the optimum temperature and pH, the stability on storage, and the heavy metal and microbiological limits of a preparation that goes into food and into starch processing. Part 3 of the enzyme preparations series. Issued on 2 December 2025, it takes effect on 1 January 2027, replacing GB/T 24401-2009.

This document provides product classifications for alpha-amylase and beta-amylase preparations, and specifies the requirements, testing rules, and procedures for amylase preparations. Marking, packaging, transportation and storage, and the corresponding test methods are described. This document applies to the production, inspection, and sale of alpha-amylase and beta-amylase preparations.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 191 Pictorial Symbols for Packaging and Storage

GB/T 601 Preparation of Standard Titration Solutions for Chemical Reagents

GB/T 602 Preparation of standard solutions for the determination of impurities in chemical reagents

GB/T 603 Preparation of reagents and products used in chemical reagent test methods

GB/T 6682 Specifications and test methods for water used in analytical laboratories QB/T 1803-2023 General Test Methods for Industrial Enzyme Preparations

3 Terms and Definitions

The following terms and definitions apply to this document. 3.1 alpha-amylase It can hydrolyze the alpha-1,4-glucosidic bonds in the starch molecular chain, breaking the starch chain into short-chain dextrans and small amounts of maltose and glucose, making... An enzyme that rapidly reduces starch viscosity. 3.2 beta-amylase It can hydrolyze alpha-1,4-glucosidic bonds sequentially from the non-reducing ends of starch molecules, and undergo the Walden transposition reaction to obtain malt. Sugar enzymes.

3.3 alpha-amylase preparations The product is prepared by means of alpha-amylase as the main catalytic active component through formulation and other processes.

Note. Excipients that help with product storage, stability, and use can be added during the formulation process. 3.4 beta-amylase preparations The product is prepared by means of beta-amylase as the main catalytic active component through formulation and other processes.

Note. Excipients that help with product storage, stability, and use can be added during the formulation process.