

ICS 67.050
CCS X 83



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

GB/T 22248-2025

Replacing GB/T 22248-2008

Determination of glycyrrhizic acid in health foods

保健食品中甘草酸的测定

Issued on: March 28, 2025

Implemented on: October 1, 2025

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

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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 specifies the technical requirements for food quality. For food safety requirements, please refer to relevant laws, regulations, policies and food safety standards. document.

This document replaces GB/T 22248-2008 "Determination of glycyrrhizic acid in health foods". Compared with GB/T 22248-2008, except for the structure In addition to adjustments and editorial changes, the main technical changes are as follows.

- a) The scope of application has been changed (see Chapter 1, Chapter 1 of the 2008 edition);
- b) The methods of sample preparation, extraction and purification have been changed (see 7.1 to 7.3, 5.1 of the 2008 edition);
- c) The chromatographic reference conditions have been changed (see 7.4, 5.3 of the 2008 edition);
- d) The formula and units for result calculation have been changed (see Chapter 8, Chapter 6 of the 2008 edition);
- e) The detection limit and quantification limit of the method have been changed (see Chapter 10, Chapter 1 of the 2008 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 these

patents.

This document is proposed and coordinated by the National Technical Committee for Standardization of Special Foods (SAC/TC466).

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

- First published in 2008 as GB/T 22248-2008;
- This is the first revision.

Determination of Glycyrrhizic Acid in Health Food

1 Scope

This document describes a method for the determination of glycyrrhizic acid in health foods by HPLC.

This document applies to health foods in dosage forms such as hard capsules, tablets, powders, pastes, teas, granules, oral liquids, wine preparations, vinegar preparations, etc.

Determination of glycyrrhizic acid.

2 Normative references

GB/T 6682

3 Terms and definitions

There are no terms or definitions that require definition in this document.

4 Principle

The glycyrrhizic acid in the sample was extracted with 50% methanol solution, purified by solid phase extraction column if necessary, separated by high performance liquid chromatography, and detected by ultraviolet detector.

Detection, qualitative analysis by retention time and quantitative analysis by external standard method.

5 Reagents or materials

Unless otherwise specified, only chromatographic grade reagents were used.

5.1 Reagents

5.1.1 Methanol (CH_3OH). 5.1.2 Acetic acid (CH_3COOH).

5.1.3 Ammonium acetate ($\text{C}_2\text{H}_7\text{O}_2\text{N}$).

5.1.4 Water. Grade 1 water as specified in GB/T 6682.

5.2 Reagent preparation

5.2.1 50% methanol solution. Take 500 mL of methanol (5.1.1), dilute to 1000 mL with water and mix well.

5.2.2 Ammonium acetate-0.5% acetic acid solution (0.1 mol/L). Take 7.71 g of ammonium acetate (5.1.3) and 5 mL of acetic acid (5.1.2), dissolve in water and Make up to 1000 mL and mix well.