

ICS 65.050
CCS B 72

LY

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

LY/T 1699-2007

Ginkgo biloba leaves extract

银杏叶提取物

(English Translation)

Issued on: June 19, 2023

Implemented on: November 1, 2023

Issued by: State Forestry and Grassland Administration

Table of Contents

Preface
1 Scope
2 Normative references
3 Terms and Definitions
4 Technical Requirements
4.1 Sensory indicators
4.2 Technical indicators
5 Sampling
6 Test methods
6.1 Sensory test
6.2 Determination of moisture
6.3 Determination of ash content
6.4 Determination of heavy metals
6.5 Determination of Arsenic
6.6 Determination of total flavonol glycosides content
6.7 Determination of total terpene lactone content
6.8 Determination of total ginkgolic acid content
6.9 Determination of rutin and quercetin content
7 Inspection Rules
7.1 Batch
7.2 Factory Inspection
7.3 Type inspection
7.4 Decision Rules
8 Marking, packaging, storage and transportation
9 Shelf life
Appendix A (Informative) Reference HPLC Conditions and Chromatogram Examples for Flavonol Aglycones
Appendix B (Informative) Reference HPLC Conditions and Chromatogram Examples for Total Terpene Lactones
Appendix C (Informative) Reference HPLC Conditions and Chromatogram Examples for Total Ginkgo Acids
Appendix D (Informative) Reference HPLC Conditions and Chromatogram Examples of Ginkgo Biloba Extract

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 replaces LY/T 1699-2007 Ginkgo Biloba Extract. Compared with LY/T 1699-2007, except for structural adjustment and editorial in addition to the modifications, the main technical changes are as follows.

- a) The terms and definitions have been changed (see 3.1, 3.2 and 3.3, 3.1, 3.2 and 3.3 of the 2007 edition);
- b) The sensory indicators have been changed (see 4.1, 4.1 of the 2007 edition);
- c) Added technical indicators for rutin and quercetin, deleted the category level, and did not set the level (see 4.2, 4.2 of the 2007 edition);
- d) Sampling was added (Chapter 5);
- e) The test method for the determination of total terpene lactones has been changed (see 6.7, 5.5 of the 2007 edition);
- f) The test method for the determination of total ginkgolic acid has been changed (see 6.8, 5.6 of the 2007 edition);
- g) Added test methods for rutin and quercetin (see 6.9).

1 Scope

Identification methods, inspection rules, marking, packaging, storage, transportation and shelf life.

This document is applicable to the use of dried ginkgo leaves as raw materials, after crushing, dilute ethanol extraction, concentration, macroporous resin adsorption and desorption, re-concentration and Extracts obtained through drying and other processes.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.

GB/T 5009.3 National Food Safety Standard Determination of Water Content in Food GB/T 5009.4 National Food Safety Standard Determination of Ash in Food GB/T 5009.11

National Food Safety Standard Determination of Total Arsenic and Inorganic Arsenic in Food GB/T 5009.74 National Food Safety Standard Heavy Metal Limit Test for Food Additives GB/T 6682 Specifications and test methods for water used in analytical laboratories

3 Terms and definitions

The following terms and definitions apply to this document.

Ginkgo flavonoids

Flavonoids contained in Ginkgo biloba leaf extract.

Note: Mainly refers to the sum of flavonol cinnamoyl glycoside compounds with quercetin, kaempferol and isorhamnetin as the parent.

Example 1

The chemical structure is shown in Figure 1.

Figure 1 Chemical structure of total flavonol glycosides from Ginkgo biloba