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

GB/T 10345-2022

Replacing GB/T 10345-2007

Method of analysis for baijiu

白酒分析方法

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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 replaces GB/T 10345-2007 "Analysis Method of Liquor". Compared with GB/T 10345-2007, the main technical changes are as follows:

- a) The method for measuring alcohol content is deleted (see Chapter 6 of the.2007 edition);
- b) Deleted the determination method of total acid (see Chapter 7 of the.2007 edition);
- c) Added the determination method for the total amount of esters (see Chapter 8);
- d) Added the determination methods of acetic acid and caproic acid (see Chapter 11, Chapter 12);
- e) Changed the determination method of ethyl acetate, ethyl butyrate, ethyl hexanoate, ethyl lactate, n-propanol, beta-phenethyl alcohol (see Chapter 10, Chapter 10, Chapter 13, Chapter 11, Chapter 12, Chapter 15, Chapter 16 of the.2007 edition);
- f) Changed the determination method of ethyl propionate, dibasic acid (pimelic acid, suberic acid, azelaic acid) diethyl ester (see Chapter 13, Chapter 14, Chapter 14, Chapter 18 of the.2007 edition);
- g) Deleted the determination method of 3-methylthiopropanol (see Chapter 17 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 by China National Light Industry Federation. This document is under the jurisdiction of the National Liquor Standardization Technical Committee (SAC/TC358). This document was drafted by: China Food and Fermentation Industry Research Institute Co., Ltd., Luzhou Laojiao Co., Ltd., Anhui Gujing Tribute Wine Co., Ltd. Co., Ltd., Yibin Wuliangye Co., Ltd., Kweichow Moutai Co., Ltd., Guangdong Food Industry Research

Institute Co., Ltd., Sichuan Jiannanchun (Group) Co., Ltd., Shanxi Xinghuacun Fen Winery Co., Ltd., Hubei Baiyunbian Wine Co., Ltd., Anhuikou Zijiu Industry Co., Ltd., Jinan Baotuquan Brewing Co., Ltd., Sichuan Gulinlang Winery Co., Ltd., Hebei Hengshui Laobaigan Wine Industry Co., Ltd., Jinpai Co., Ltd., China Light Food Inspection and Certification Co., Ltd., Site Liquor Co., Ltd., Kweichow Moutai Distillery (collection Group) Xijiu Co., Ltd., Shanghai Liquor Product Quality Inspection Center Co., Ltd., Hubei Daohuaxiang Liquor Co., Ltd., Guangdong Province Jiujiang Winery Co., Ltd., Beijing Shunxin Agriculture Co., Ltd. Niulanshan Winery, Sichuan Mianyang Fenggu Wine Co., Ltd., Beichun Group Co., Ltd., Jiangsu Yanghe Winery Co., Ltd., Puyan (Shanghai) Standard Technical Service Co., Ltd., Shandong Jingzhi Wine Industry Co., Ltd., Radio and Television Metrology and Testing (Chengdu) Co., Ltd., Guangxi Zhuang Autonomous Region Analysis and Testing Research Center, Anhui Guotai Zhongxin Inspection Measurement Technology Co., Ltd., Guizhou Dongjiu Co., Ltd., Food and Drug Inspection Research Institute (Shandong) Group Co., Ltd., Shandong Pullover Well Co., Ltd. Co., Ltd., Sichuan Sinas Analysis and Testing Co., Ltd., Infinitus (China) Co., Ltd. The main drafters of this document. Gao Hongbo, Meng Zhen, Zhang Suyi, Wang Li, Xu Zhancheng, Feng Zhiqiang, Guo Wenjie, Chen Hongkun, Guo Xinguang, Wang Fengxian, Yang Tuanyuan, Xu Qinxian, Lv Zhiyuan, Shen Yi, Zhang Yuxing, Lei Mingming, Wu Shengwen, Zhong Fangda, Wang Minfeng, Chen Ping, He Songgui, Wei Jinwang, Lu Zhongming, Zhong Qiding, Du Xinyong, Zhong Yu, Wu Haiping, Yang Renjun, Jiang Jian, Huang Yifan, Chen Hongzhou, Wang Yi, Sun Xuewen, Zhang Fengguo, Sun Hongmei, Luo Jin, Zhou Fangmei, Gao Xiaojuan, Yin Changwei, Chen Yanhe, Chang Di, Liu Weide, Ji Yu. The previous versions of this document and its superseded documents are as follows:

---First published in 1989 as GB/T 10345.1-1989~GB/T 10345.8-1989;

--- Revised for the first time in.2007 to GB/T 10345-2007;

---This is the second revision. Analysis method of liquor

1 Scope

GB/T 10345-2022 is the Chinese national standard on method of analysis for baijiu, in the field of food technology. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 11 July 2022 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 February 2023. Classification: ICS 67.160.10, CCS X61. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document specifies the general rules, basic requirements and detailed test procedures

for liquor analysis. This document applies to the analysis of various liquors.

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. Preparation of

GB/T 601 Standard Titration Solutions for Chemical Reagents Preparation of preparations and products used in

GB/T 603 chemical reagent test methods

GB/T 6682-2008 Specifications and test methods for water used in analytical laboratories

3 Terms and Definitions

There are no terms and definitions that need to be defined in this document.

4 General

4.1 The terms and measurement units used in this document shall comply with the relevant national standards.

4.2 The instruments in this document are necessary for analysis, and general laboratory instruments are no longer included.

4.3 The water used in this document and the water used in the chromatographic analysis test are the second-grade water or above specified in GB/T 6682-2008. When other requirements are specified, it shall comply with the specifications for water above Grade 3 (including Grade 3) in GB/T 6682-2008. Reagents used, unless otherwise specified All refer to analytical grade (AR).

4.4 The solutions in this document, unless otherwise specified, refer to aqueous solutions.

4.5 The chromatographic reference conditions in the chromatographic analysis test can be based on the conditions of the instrument and the chromatographic column, and the optimal chromatographic conditions can be selected through the test to make the internal standard group. The sub-chromatographic peaks are completely separated from the chromatographic peaks of the components to be measured, and the concentration of the standard working solution series can be adjusted appropriately according to the content of the components to be measured in the sample.

4.6 Standard material stock solution used in this document (in which the internal standard standard stock solution is referred to as "internal standard solution" in this document) After the preparation is completed, transfer it to a reagent bottle, and store it in a low temperature

refrigerator at 0 °C ~ 4 °C.

4.7 When there are two or more analysis methods for the same test item, the first method shall be the arbitration method.

5 Basic requirements

5.1 To measure the samples, parallel tests should be done. The analysis results are reported as the arithmetic mean of the measured data, and do not need to be converted into alcohol content.

5.2 The significant figures in the analysis method indicate the required precision when drawing or weighing.