

ICS 67.220.10

CCS X 69



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

GB/T 8269.1-2025

Replacing GB/T 8269-2006

Quality requirements for organic acids - Part 1: Citric acid

有机酸质量要求 第1部分：柠檬酸

Issued on: April 25, 2025

Implemented on: May 1, 2026

**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. And other files.

This document is Part 1 of GB/T 8269 "Quality requirements for organic acids". GB/T 8269 has been published in the following parts. --Part 1: Citric acid.

This document replaces GB/T 8269-2006 "Citric Acid". Compared with GB/T 8269-2006, except for structural adjustments and editorial changes, In addition, the main technical changes are as follows.

-- Changed the relative molecular mass of "anhydrous citric acid" (see 4.2.2, 3.2.2 of the 2006 edition);

-- Changed "Product Classification" (see Chapter 5, Chapter 4 of the 2006 edition);

-- Deleted the taste and solubility requirements in "sensory requirements" (see 5.1 of the 2006 edition);

-- Changed the "light transmittance" requirement in the physical and chemical requirements, and deleted the "arsenic salt" and "heavy metal" requirements (see Table 2, 2006 Edition Table 1);

-- Changed the test methods for "identification", "sensory requirements" and "moisture content" (see 7.2, 7.3 and 7.6, 6.2, 6.1 and 6.5 of the 2006 edition);

--Changed the batch regulations, factory inspection items and type inspection items (see 8.1, 8.3.2 and 8.4, 7.1, 7.3.2 of the 2006 edition and 7.4).

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 Technical Committee for Standardization of Food Industry (SAC/TC 64).

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

--First published as GB/T 8269-1998 in 1998 and first revised in 2006;

--This is the second revision.

Introduction

With the rapid development of the organic acid industry, the types of organic acids have diversified, the product quality has been improved, and the product variety has been enriched.

The industry technology has made great progress and development. GB/T 8269 "Quality Requirements for Organic Acids" was formulated to regulate the product quality and testing of organic acids.

Standardization and standardization of methods are the basic work to regulate the industry order of organic acids and related products and promote industrial development.

GB/T 8269 "Quality requirements for organic acids" is intended to consist of two parts.

--Part 1: Citric Acid. The purpose is to improve the product quality of the citric acid industry.

--Part 2: Industrial itaconic acid. The purpose is to improve the product quality of the

industrial itaconic acid industry.

Quality requirements for organic acids Part 1: Citric acid

1 Scope

This document specifies the requirements, inspection rules, marking, packaging, transportation and storage of citric acid, describes the corresponding test methods, and gives Chemical name, molecular formula, structural formula, relative molecular mass information and product classification.

This document applies to the production, inspection and sales of citric acid products produced by fermentation using starch or sugar as raw materials.

2 Normative references

GB/T 191

GB/T 601

GB/T 602

GB/T 603

GB 5009.3-2016

GB/T 6682

3 Terms and definitions

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

4.1 Chemical name

2-Hydroxypropane-1,2,3-tricarboxylic acid.

4.2 Anhydrous citric acid

4.2.1 Molecular formula. $C_6H_8O_7$.

4.2.2 Relative molecular mass. 192.13 (according to the 2022 international relative atomic mass). 4.2.3 Structural formula.