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

GB/T 47365-2026

**Technical specification for phytosanitary modified atmosphere
treatments**

植物检疫气调调节处理技术规范

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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. Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed and is under the jurisdiction of the National Technical Committee on Standardization of Plant Quarantine (SAC/TC271). This document was drafted by: China Customs Science and Technology Research Center, Shenzhen Customs Animal and Plant Quarantine Technology Center, and Binzhou Medical University. Guangzhou Customs Technology Center, Shanghai Customs Animal and Plant and Food Inspection and Quarantine Technology Center, Dalian Customs Technology Center, and the People's Republic of China State Customs, Zhejiang University of Commerce and Industry. The main drafters of this document are: Ren Lili, Liu Bo, Zhang Rongrong, Wei Shuang, Wang Shuping, Li Xin, Liu Haijun, Qian Lu, Lu Yanbin, Hao Xin, and Kong Weiheng. Technical Specifications for Controlled Atmosphere Treatment in Plant Quarantine

1 Scope

GB/T 47365-2026 is the Chinese national standard covering killing quarantine pests by changing the air around the commodity - very low oxygen or high carbon dioxide held for a defined period, which suits fresh produce that would be damaged by heat or fumigation. First edition, in force since 1 October 2026, with the temperature treatment standard GB/T 47385-2026. It was issued on 31 March 2026 and takes effect on 1 October 2026, as a first edition. The document is under the responsibility of the Standardization Administration of China. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document specifies the procedures for determining the treatment scheme, facility commissioning, implementation, post-treatment measures, documentation, and record

keeping for plant quarantine controlled atmosphere treatment. Storage requirements. This document applies to controlled atmosphere treatment for phytosanitary purposes before export, during transport, and under quarantine conditions at the point of entry. This document does not apply to modified atmosphere packaging for the purpose of food preservation or quality maintenance.

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 20478 Plant Quarantine Terminology gencyaction)

3 Terms and Definitions

The terms and definitions defined in GB/T 20478 and the following terms and definitions apply to this document.

3.1 By altering the composition of gases in the treatment system, specific pests can be killed, preventing their colonization, spread, or proliferation, and maintaining commercial operations. Quarantine treatment methods for the basic quality of products.

Note. The composition of the gas includes reducing the concentration (volume fraction) of oxygen (O₂) in the gas (usually reducing it to below 1%), or increasing the concentration of carbon dioxide (CO₂). Concentration (volume fraction) (10%~85%), or a combination of both, can be achieved.

4 Determination of the treatment plan

4.1 Determine processing parameters When implementing controlled atmosphere treatment, the relevant requirements of ISPM 28 should be met, and the determined treatment parameters include, but are not limited to.

---Treats ambient gas concentrations (O₂, CO₂);

---Processing duration;

---Temperature (air temperature, product temperature);

4.2 Gas Concentration Adjustment The concentrations of O₂ and CO₂ can be adjusted in the following ways.