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

GB/T 45591-2025

**Code of practice for phytosanitary phosphine fumigation
treatments of fruits and vegetables**

果蔬磷化氢检疫熏蒸处理技术规程

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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 is required.

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 is proposed and coordinated by the National Technical Committee on Plant Quarantine Standardization (SAC/TC271).

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Technical regulations for phosphine quarantine fumigation of fruits and vegetables

1 Scope

This document establishes the procedures for the quarantine fumigation of fruits and vegetables with phosphine, and stipulates the basic requirements for the application of

phosphine fumigation, fumigation facilities and equipment, Requirements for fumigation treatment and result determination, etc., describe the verification method.

This document applies to the phosphine room temperature fumigation treatment, phosphine low temperature fumigation treatment and phosphine comprehensive fumigation treatment of fruits and vegetables carrying harmful organisms. Combined processing.

2 Normative references

GB 12358

GB/T 17913

GB/T 20478

GB/T 31752

GB/T 36854

3 Terms and definitions

The terms and definitions defined in GB/T 20478, GB/T 17913 and GB/T 36854 and the following apply to this document.

3.1

At room temperature or low temperature, phosphine gas alone or in combination with carbon dioxide (CO₂) (or other fumigant gases) is used to form The mixed gas is maintained at a specific concentration in a confined space for a certain period of time to kill harmful organisms.

3.2

Use pure phosphine gas or a composite gas formed by mixing with other fumigant gases (including on-site real-time mixing and pre-mixing to produce two A device that releases a specified amount of gas into a closed fumigation environment to carry out fumigation and insecticide killing.

3.3

A device for detecting the concentration of phosphine gas in a closed fumigation environment or working environment.

4.1 Site requirements

The fumigation site should meet the requirements of GB/T 31752 and GB/T 36854 and should be located in a place that is sheltered from wind, has a flat ground, is easy to

disperse the poison, and is convenient for operation.

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