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

**GB 46521-2025**

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**Safety technical specifications for production machinery and  
equipment of fireworks**

烟花爆竹生产机械设备安全技术规范

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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 Ministry of Emergency Management of the People's Republic of China. Safety Technical Specifications for Fireworks and Firecrackers Production Machinery and Equipment

## 1 Scope

GB 46521-2025 is the Chinese national standard on safety technical specifications for production machinery and equipment of fireworks, in the field of environment and health protection, safety. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 5 October 2025 by the State Administration for Market Regulation; Standardization Administration of China, and takes effect on 1 November 2026. Classification: ICS 13.110, CCS C68. 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 design and layout, structure and materials, explosion-proof

and anti-static properties, control systems, and standards for pharmaceutical-related machinery and equipment used in fireworks and firecracker production. Safety technical requirements for signage, installation, use and maintenance, and supporting documentation. This document applies to pharmaceutical-related machinery and equipment used in the production of fireworks and firecrackers.

## 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 4053.3 Safety requirements for fixed steel ladders and platforms - Part

## 3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Mechanical equipment used for processing and manufacturing black powder, pyrotechnic powder, single-base powder, fuses, and other drugs, as well as semi-finished and finished products of pyrotechnic fireworks and firecrackers.

Note. Pharmaceutical machinery and equipment are divided into bare drug type and non-bare drug type.

3.2 Mechanical equipment in which a part directly contacts exposed black powder, pyrotechnic powder, single-base powder, or other similar materials.

3.3 It is a mechanical system consisting of multiple independent mechanical devices and auxiliary equipment, capable of producing products or components.

3.4 Online drug dosage in-process inventory During the production process of a product or component, the drugs in various parts of the machinery (including the drug feeding area, the drug-containing semi-finished product feeding area, and the product discharging area) are... Total amount.