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

GB/T 20613-2026

Replacing GB/T 20613-2006

**Fireworks - Specification for storage and transport safety
inspection**

烟花爆竹 储存运输安全性能检验规范

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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. This document supersedes GB/T 20613-2006 "Safety Performance Inspection Standard for Storage and Transportation of Fireworks and Firecrackers" and is consistent with GB/T 20613-2006. In comparison, aside from structural adjustments and editorial changes, the main technical changes are as follows:

- a) The required sample quantity for the testing items has been changed (see Chapter 4, Chapter 3 of the 2006 edition);
- b) The equipment requirements have been changed; the accuracy requirements for temperature and humidity are now specifically listed, specifying the set temperature/humidity (see 5.1.1.1, 5.2.1.1, 5.3.1.1). (Versions 4.1.1.1, 4.2.1.1, and 4.3.1.1 from the 2006 edition)
- c) The low-temperature test temperature has been changed from -50°C to -35°C to -25°C

(see 5.3.1.1,

4.3.2 in the.2006 version);

d) The crash test duration has been changed from 2 hours to 1 hour (see 5.4.2.3,

4.5.2.2 in the.2006 version);

e) Revise the description of friction categories in the integrated crash test results assessment (see 5.4.3,

4.4.3.2 of the.2006 version);

f) Revise the description of friction-related factors in the integrated vibration test result evaluation (see 5.5.3,

4.5.3.2 of the.2006 version);

g) Modify the description of friction in the integrated drop test result evaluation (see 5.6.3,

1 Scope

GB/T 20613-2026 is the Chinese national standard covering checking that fireworks are safe to store and move - the packaging, the compatibility of what is packed together, the thermal stability and the tests that decide the transport classification. It replaces GB/T 20613-2006 and has been in force since 1 June 2026, with the fireworks environmental test standard GB/T 47163-2026. It was issued on 27 February 2026 and has been in force since 1 June 2026, replacing GB/T 20613-2006. The document is under the responsibility of the China National Light Industry Council. 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 inspection items and quantity comprehensive evaluation for the safety performance testing of fireworks and firecrackers during storage and transportation, and describes the test methods. This document applies to the safety performance inspection of fireworks and firecrackers during storage and transportation, and is used for the storage and transportation safety performance in the following situations. evaluate.

---Type testing before new product production;

---Conduct regular or irregular spot checks on products that have been in production for a long time;

---Whenever necessary. This document is not applicable to safety performance evaluation in any of the following situations.

---Products transported by air;

---Semi-finished products in the production process;

---Products affected by static electricity or electromagnetic fields.

4. Inspection Items and Quantities The safety performance inspection items for the storage and transportation of fireworks and firecrackers include. thermal stability test, temperature/humidity test, low temperature test, and impact test. Vibration test and drop test. The inspection items are for transport packages. Except for the drop test, which requires three transport packages, the other items require one transport package. For packaging, the test can be stopped if any sample fails to meet the requirements, and the storage and transportation safety performance of the product will be assessed. Unqualified.

5.1.1 Instruments and Equipment

5.1.1.1 Temperature test chamber. $75^{\circ}\text{C}\pm 2^{\circ}\text{C}$.

5.1.1.2 Automatic Temperature Recording System. Measures, records, and saves the temperature inside the test chamber in real time.

5.1.2 Test Procedure Place a clean sheet of white cardboard (weighing over 350g) on the partition of the test chamber (to observe whether the sample leaks after the test). (The length and width should be larger than the corresponding dimensions of the specimen). Place the specimen on the white cardboard, turn on the test chamber, and start measuring when the test chamber temperature reaches 75°C . After 48 hours of constant temperature testing, observe and record the changes in the sample and individual products in the chamber.

5.1.3 Result Evaluation If any sample or individual product exhibits any of the following characteristics, the test result is considered unqualified.

---Sample combustion or explosion;

---The sample produces smoke or gas;

---Leakage occurred in the sample;

---External damage to the sample or significant changes in the appearance and structure of a single product sample.

5.2.1 Instruments and Equipment

5.2.1.1 Temperature/Humidity Test Chamber. Temperature is $40^{\circ}\text{C}\pm 2^{\circ}\text{C}$, relative humidity is $90\%\pm 5\%$.

5.2.1.2 Automatic temperature and humidity recording system. measures, records and saves the temperature and humidity inside the constant temperature and humidity test chamber in real time.

5.2.2 Test Procedure Place a clean sheet of white cardboard (weighing over 350g) on the partition of the temperature/humidity test chamber (to observe whether the sample after the test is satisfactory). (To prevent leakage, the length and width of the paper should be larger than the corresponding dimensions of the sample). Place the sample on the white cardboard, turn on the test chamber, and set the temperature and humidity of the test chamber to within the specified range. Timing begins when the temperature and humidity reach 40°C and 90%. After 48 hours of constant temperature and humidity testing, the changes in the sample and individual products inside the chamber are observed and recorded.

5.2.3 Result Evaluation If any sample or individual product exhibits any of the following characteristics, the test result is considered unqualified.

- Sample combustion or explosion;
- The sample produces smoke or gas;
- Leakage occurred in the sample;
- External damage to the sample or significant changes in the appearance and structure of a single product.

5.3.1 Instruments and Equipment

5.3.1.1 Low temperature test chamber. (-35~-25)°C±2°C.

5.3.1.2 Automatic Temperature Recording System. Measures, records, and saves the temperature inside the test chamber in real time.

5.3.2 Test Procedure Place a clean sheet of white cardboard weighing over 350g on the partition of the low-temperature test chamber (to observe whether the sample leaks after the test). (The length and width of the paper should be larger than the corresponding dimensions of the sample.) Place the sample on the white cardboard, turn on the test chamber, and allow the chamber temperature to reach -35°C. Timing begins at -25°C. After 48 hours of constant temperature testing, the changes in the sample and individual products inside the chamber are observed and recorded.

5.3.3 Result Evaluation If any sample or individual product sample exhibits any of the following phenomena, the test result for this item is considered unqualified.

- Leakage occurred in the sample;
- External damage to the sample or significant changes in the appearance and structure of a single product.

5.4 Collision Test

5.4.1 Instruments and Equipment Impact test bench. The maximum load (including fixtures)