

ICS 97.200.50

CCS Y57



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

GB 26387-2011

**Safety of toys - Experimental sets for chemistry and related
activities**

玩具安全 化学及类似活动的实验玩具

Issued on: May 12, 2011

Implemented on: September 15, 2011

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China;
Standardization Administration of China**

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Foreword

All the technical contents of this standard is mandatory. This standard is specific requirements and chemical experiments toy similar activities, and GB 6675 series of standards, GB 19865 (applies to Games A) used in combination. This revised standard adopts BSEN71-4:2007 "experiment toy toy safety chemistry and similar activities." This standard BSEN71-4. Compared to 2007, the main technical differences are as follows:

- Modify the risk of danger signs and symbols marking requirements;
- Modify the labeling requirements;
- Modified Goggle's impact test;
- Adjustments to the original text of section 5.2.6 "borosilicate glass density determination method of identifying" as Appendix A. This standard Annex A, Annex B normative appendix. The standard proposed by China National Light Industry Council. This standard by the National Toy Standardization Technical Committee (SAC/TC253) centralized. This standard was drafted. Guangdong Entry-Exit Inspection and Quarantine Bureau Technology Center Toys Lab, SZCIQ play With detection technology center, Ningbo CIQ light industrial products testing center, eastern Guangdong CIQ Toy Testing Heart, Guangzhou CVC Testing Institute, Guangdong Alpha Animation and Culture Co., Ltd., Beijing Certification Center of Light. The main drafters of this standard. Liuchong Hua, Han Fang, Jiang Liyuan, Ruan Jian Miao, Wang Yu, Fan Cen Liang, Wang Long. Toys Toys and chemical safety experiment similar activities

1 Scope

GB 26387-2011 is the Chinese national standard on safety of toys - experimental sets for chemistry and related activities, in the field of domestic and commercial equipment, entertainment, sport. 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 12 May 2011 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 15 September 2011. Classification: ICS 97.200.50, CCS Y57. 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 standard specifies the particular substances and preparations and chemical experiments toy similar activities can be used and the maximum amount, as well as the class Labeling requirements for toys, the contents list, instructions for use and for testing equipment. This standard applies to chemistry experiment toys and attachments.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 531 pocket rubber hardness indentation hardness test methods

GB 5296.5 consumer use - Part 5. Toys

GB 6675 National Safety Technical Code for Toys

GB 13690 chemical classification and hazard communication General

ISO 868 plastics and hard rubber durometer using the indentation hardness
[Plasticsandebonite-Determinationofin- dentationhardnessbymeansofadurometer
(shorehardness)] Requirements and test methods

ISO 8317 open child-resistant packaging reclosable package (Child-resistantpackaging-
Requirementsandtestingproceduresforreclosablepackages)

3 Terms and Definitions

The following terms and definitions apply to this standard.

3.1 Chemistry Experiment Toys chemistryset Experimental toys containing one or more chemical substances and/or chemical preparations, whether or not with equipment for chemical testing.

Note. This definition also applies to test toys mineralogy, biology, physics, microscopy, environmental science and other fields, as long as they contain one or more Chemical substances and chemical preparations.

3.2 Additional means supplementaryset Chemical plants and chemical experiments toy sets used in conjunction.

4 Chemicals

4.1 Tables 1 and 2 chemical substances, chemical preparations and chemical indicator can be used to test toys, used in an amount not exceeding the Limit specified in the table. Indicator provided in the form of a solution having a solid content should not exceed the limits specified in Table 2. Table 1 chemical substances and products with limited risk category Chemical substances and preparations of the maximum amount in each toy hazard class a CAS Registry Number Aluminum potassium sulfate b 10g - 10043-67-

5 Hexamethylene tetramine (solid fuel) 10g hazardous, flammable solids h 100-97-

0 Iron/iron b, g 100g flammable solids h 7439-89-

5.2.1 Tubes

5.2.1.1 tubes for heating Instructions for use, such as a test tube containing a chemical heating experiments toy, in which all tubes used to make heating test applications heat resistance boron Silicate glass. Borosilicate glass test in accordance with Appendix A of discrimination. Length for heating the glass tube should be greater than 110mm, shall be greater than the inner diameter of 15mm.

5.2.1.2 test tube is not used for heating Instructions contained in test tubes and glass tubes are not used to heat the chemical test is not made of borosilicate glass, in toys Some

6.2 tube should be labeled. Heating the glass tube is not used (for example. the use of non-chemical test tubes), the length should be less than 90mm, the inner diameter should be less than 12mm.

5.2.2 Other glassware Instructions for use, such as glassware comprising heating chemical test toys where all the vessels for heating the heat-resistant borosilicate application Salt glass. Borosilicate glass test in accordance with Appendix A of discrimination. The above requirement does not apply to heat it for the purpose of bending the glass tube. Other vessels for heating, if not in shape and appearance may be mistaken for a heatable

container shall be labeled 6.2.

5.2.3 reagent container Reagent container size and shape should be different from the test of glassware, to avoid being mistaken for trial testing glassware use. All containers should be shock, when tested by the following method there should be no breaks, cracks or leaks. From (850 ± 50) mm in height in the most unfavorable position dropped to a level placed on a hard surface, 4mm thick stainless steel plate, the 2mm thick stainless steel plate coated with a coating having a Shore hardness hardness (75 ± 5) degrees (according to ISO 868 or GB/T 531 test). weight Complex dropped a total of five times. Visual observation vessel for damage, cracks or leaks.

5.2.4 Cover Shall cover one of the following requirements.

--- In line with the requirements of ISO 8317;

--- Need to open two separate actions. a vertical downward pressure and a clockwise or counterclockwise direction (dentate Interface) Of torque. B.1 in Appendix B of the first chapter (cover Test Method A) test, the lid should not be opened;

--- Should contain an inner plug, you need to use external tools to open. With a special cover only special tools can be opened. Appendix Press Section B, Chapter B.2 (cover Test Method B) test, the lid should not be opened. In addition, the closure for a container for liquids in accordance with Appendix B of when the first chapter B.3 (cover Test Method C) for testing should not have broken, cracked Seam or leakage. NOTE. The purpose of this test is to prevent young children in contact with these products chemicals.

5.2.5 Empty containers Maximum capacity for the storage of empty containers of reagents in accordance with the requirements of Table 4, respectively, should not exceed 50mL and 100mL. Table 4 empty storage container with a maximum capacity of reagent The maximum capacity of the reagent/mL Ammonia water, 2mol/L

50 Hydrochloric acid, 2mol/L 100 Hydrogen peroxide, 1mol/L 100 Sodium hydroxide solution, 1mol/L 100

5.3 pipetting apparatus Can not be used when pipetting liquid nozzle suction pipette. If you need pipetting liquids, should not be to provide a mechanical pipette suction mouth party Type, for example. with fixed emitter of eyedropper.

5.4 tube rack and test tube holder When a test tube containing 5mL of water is placed in a test tube rack outermost holes and tilted 15° , tube racks can not be overturned. When the test is in progress need to be heated, it should be equipped with suitable test tube holder.

5.5 eye protection device Goggle from the function and should be designed to maximize the protection of the eyes. Blinkers the transparent protective material according to GB 6675 imitation toys impact test should not rupture. If the experiment toy without adult supervision for people with eye protection device, the packaging should be labeled according to 6.3.2.