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**NATIONAL STANDARD OF THE  
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**Safety code for inspection of hazardous properties for  
dangerous goods--General specifications**

危险货物危险特性检验安全规范 通则

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## Foreword

Chapters 5, 6, 7, 8 of this standard are mandatory. The rest are recommended. The degree of consistency between this standard and the United Nations "Recommendations on the Transport of Dangerous Goods - Model Regulations" (13th revision) is non-equivalent. Its relevant technical content is consistent with the above regulations. The standard text format makes editorial changes, in accordance with GB/T 1.1-2000. Appendix A and Appendix B of this standard are normative appendixes. This standard was proposed by AND shall be under the jurisdiction of the National Standardization Technical Committee on Hazardous Chemicals Management (SAC/TC 251). Responsible drafting organizations of this

standard. AQSIQ Central Laboratory of Dangerous Goods. Participated drafting organizations of this standard. Tianjin Entry-Exit Inspection and Quarantine Bureau, Asia-Pacific Dangerous Goods Association, Jiangnan University. The main drafters of this standard. Wang Libing, Zhao Guoqing, Huang Yong, Tian Jiayin, Lv Gang, Sun Shujun. This standard is formulated for the first time. Safety code for inspection of hazardous properties for dangerous goods - General specifications

## 1 Scope

GB 19458-2004 is the Chinese national standard on safety code for inspection of hazardous properties for dangerous goods--general specifications. 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 4 March 2004 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 1 October 2004. Classification: ICS , CCS A80. 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 terms and definitions, classification, requirements, testing, marking, inspection rules of dangerous goods. This standard is applicable to the inspection of dangerous characteristics of dangerous goods.

## 2 Normative references

The provisions in following documents become the provisions of this Standard through reference in this Standard. For the dated references, the subsequent amendments (excluding corrections) or revisions do not apply to this Standard; however, parties who reach an agreement based on this Standard are encouraged to study if the latest versions of these documents are applicable. For undated references, the latest edition of the referenced document applies.

GB 190 Packing symbol of dangerous goods

GB/T 3690-1992 Classification and sign of commonly used dangerous chemical products  
United Nations Recommendations on the Transport of Dangerous Goods - Model Regulations (13th revision)

## 3 Terms and definitions

The following terms and definitions, which are defined in GB/T 3690 and "Recommendations on the Transport of Dangerous Goods - Model Regulations" (13th

revision) apply to this standard.

3.1 Explosive Solid or liquid substances which, under external action (such as heat, pressure, impact, etc.), can undergo violent chemical reactions, generate a large amount of gas and heat instantaneously, cause the surrounding pressure to rise rapidly and explode, thereby damaging the surrounding environment items.

3.2 Gas Substances which have a vapor pressure greater than 300 kPa at 50 °C. OR a substance that is completely gaseous at a standard pressure of 101.3 kPa at a temperature including 20 °C.

3.3 Flammable liquid Flammable liquids, liquid mixtures or liquids containing solid substances.

#### **4.1 Category of dangerous goods**

4.1.1 Dangerous goods are divided into 9 categories, according to their specific hazards or the most important hazards. Some categories are subdivided into items. The order of the numbers of the categories and items is not in order of degree of hazard.

#### **5.1 Safety requirements**

5.1.1 The producer of a new product or the entrusting party applying for the classification of the product shall provide all available safety data about the product, such as toxicity data.

5.1.2 When there is suspicion of explosiveness, a small-scale preliminary test shall be carried out first; then the test of a larger quantity of substances shall be carried out. Preliminary tests include determining the sensitivity of the substance to mechanical stimuli (impact and friction) as well as to heat and flame.

#### **5.2 Test requirements**

5.2.1 The test of hazardous characteristics shall be carried out, according to the test conditions. If no tolerance is given in the experiments, this means that the accuracy is determined by the number of decimal places for any given dimension, e.g.,

5.2.2 The composition of the experimental sample shall be consistent with the concentration of the substance to be transported.

5.2.3 All test materials, in contact with the test substance, shall not affect the test results. If the effect cannot be ruled out, precautions shall be taken, to prevent it from affecting the experimental results. The precautionary measures taken shall be listed in the test report.

### **6 Tests**

6.1 Carry out the inspection, item by item, according to the 9 categories of dangerous goods classification tests, which are stipulated in the United Nations "Recommendations on

the Transport of Dangerous Goods - Model Regulations" (13th revision), unless there is a definite basis to exempt some items.

6.2 When a substance, mixture or solution has more than one hazard, meanwhile its name is not included in the list of dangerous goods in Chapter

3.2 of the United Nations "Recommendations on the Transport of Dangerous Goods - Model Regulations" (13th revision), its category shall be determined in accordance with the following order.

6.3 For goods, which have multiple hazards BUT are not specifically listed in the Dangerous Goods List in Chapter

3.2 of the United Nations "Recommendations on the Transport of Dangerous Goods - Model Regulations" (13th revision), it means that the strictest packing category of these goods of relevant hazards of the goods has priority over other packing groups, as shown in Appendix A.

## 7 Signs

7.1 Types of signs There are 9 categories and 21 types of signs for dangerous characteristics of dangerous goods, see Appendix B.

7.2 Graphics of sign The shape of the sign is a square (diamond), which has an angle of 45°. The minimum size is generally 100 mm x 100 mm. It consists of four parts.

### 7.3 Use of sign

7.3.1 Principles of using the sign When a dangerous goods has more than one hazard, in addition to using the sign to indicate the main hazard category, the corresponding sign of other important hazard categories shall also be used.

## 8 Inspection rules

8.1 Inspection items. Carry out inspection item by item according to the requirements of Chapter 5, Chapter 6, Chapter 7 of this standard.

8.2 Under the following circumstances, the manufacturer shall apply to the relevant inspection department for inspection of hazardous characteristics, before submitting for transportation.

8.3 Each type of hazardous characteristics shall be tested and judged according to effective test methods.

8.4 For hazardous characteristics, that can only be determined by multiple experiments, effective test procedures shall be established.