CCS A87

# NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA



# GB 17915-2013

## Specifications for storage and preservation of corrosive goods

腐蚀性商品储存养护技术条件

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**Standardization Administration of China**

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## 1 Scope

GB 17915-2013 is the Chinese national standard on specifications for storage and preservation of corrosive goods. 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 17 December 2013 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 July 2014. Classification: ICS , CCS A87. 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 of specifications for storage and preservation of corrosive goods, as well as the storage conditions, storage requirements, preservation technology, safe operation, exit-warehouse and emergency treatment requirements. This Standard is applicable to storage and preservation of goods defined in

3.1.

## 2 Normative References

The following documents are indispensable to the application of this document. In terms of references with a specified date, only versions with a specified date are applicable to this document. In terms of references without a specified date, the latest version (including all the modifications) is applicable to this document.

GB 6944-2012 Classification and Code of Dangerous Goods

GB 15258 General Rules for Preparation of Precautionary Label for Chemicals

GB 50016 Code for Fire Protection Design of Buildings

GB 50046 Standard for Anticorrosion Design of Industrial Constructions

## 3 General Test Conditions

The following terms and definitions are applicable to this document.

3.1 Corrosive Goods Corrosive goods refer to the substances that, through chemical action, cause severe damage when biological tissues are in contact, or, seriously damage or even destroy other goods or vehicles in case of leakage. NOTE: the classification of dangerous goods in

4.9.1 in GB 6944-2012 is modified.

### 4.1 Warehouse

4.1.1 Warehouse shall be cool, dry, well-ventilated and kept away from the light. It shall receive anti-corrosion and anti-leakage treatment. The constructions of warehouse shall comply with the stipulations of GB 50046.

4.1.2 Warehouse that stores fuming nitric acid, bromine and perchloric acid shall be dry and well-ventilated. The fire resistance requirements shall comply with the stipulations of GB 50016; the fire resistance level shall be not lower than Level-2.

4.1.3 Hydrobromic acid and hydroiodic acid shall be kept away from light. Bromine shall be specially stored.

4.2 Goods Shed and Open-air Yard Goods shed shall be dry and clean. Open-air yard shall be moisture-proof and waterproof.

### 4.3 Safety

4.3.1 Corrosive goods shall avoid direct sunlight and exposure to the sun, and be kept away from heat source, power and fire source. Warehouse constructions and various equipment

shall comply with the stipulations of GB 50016.

4.3.2 Corrosive goods shall be classified and stored in accordance with different categories, natures, degrees of danger and fire extinguishing methods, etc. Corrosive goods whose natures and fire extinguishing methods are counterbalanced shall not be stored in the same warehouse, as it is shown in Appendix A.

4.3.3 Emergency treatment facilities, for example, eyewash equipment, shall be installed in the warehouse area.

### 4.4 Environment

4.4.1 Warehouse shall be kept clean.

4.4.2 The debris and flammable substances in the warehouse area shall be cleaned up in time. The water drainage shall be kept unblocked.

4.5 Temperature and Humidity Temperature and humidity shall comply with the stipulations in Table 1.



### 5.1.2 Acceptance inspection items

5.1.2.1 Packaging 5.1.2.1.1 Packaging label shall comply with the stipulations of GB 15258. 5.1.2.1.2 The packaging shall be tightly sealed, intact and free from moisture or contamination. 5.1.2.1.3 The packaging and container liner shall be proper, safe and firm.

5.1.2.2 Senses 5.1.2.2.1 The properties, color, viscosity and transparency of goods shall comply with relevant product standards. 5.1.2.2.2 Liquid goods shall have no abnormal color or leakage. 5.1.2.2.3 Solid goods shall have no discoloration, deliquescence or dissolution.

### 5.1.3 Acceptance inspection

5.1.3.1 Two-person review system shall be implemented.

5.1.3.2 The acceptance inspection shall comply with the stipulations of

5.1.1 and 5.1.2.

5.1.3.3 In terms of qualified goods, go through the warehouse-entry procedures; fill in acceptance inspection record.

### 5.2 Stacking

5.2.1 Principle The stacking of goods shall be convenient for stacking, inspection and fire extinguishing. The stacks shall be neat.

### 5.2.2 Method

5.2.2.1 In terms of goods stored in warehouses, goods sheds or open-air yards, there shall be moisture barrier facilities under the stack. Generally speaking, the distance between the shelf and the warehouse ground is not lower than 15 cm; the distance between the stacking and the ground is not lower than 30 cm.

5.2.2.2 In accordance with the nature and the packaging specifications of goods, adopt appropriate stacking methods. It is required that the stacks shall be neat, the stacking shall be firm, and the quantity shall be accurate. Avoid turning the stacks upside down.

5.2.2.3 In accordance with the warehouse-entry order or the batch No., respectively stack. day; clean up flammable substances in time. Maintain the firmness of the stacking; ensure that there is no abnormality or leakage.

6.2.1.2 In case of special weather, check in time whether the goods are affected with damp and whether the tonnage pads in the yard are tight.

6.2.1.3 Regularly inspect whether the facilities, fire extinguishing equipment and protective equipment in the warehouse are complete and effective.



### 6.2.2 Quality inspection

6.2.2.1 In accordance with the nature of goods, regularly conduct sensory quality inspection; randomly inspect 1 ~ 2 PCS of each variety of product.

6.2.2.2 Check the product packaging, sealing and gaskets for damage, leakage and appearance changes.

6.2.2.3 In terms of goods under warehouse-entry measurement, conduct inspection at a certain time interval; calculate the storage loss.

### 6.2.3 Problem handling

6.2.3.1 The results of the inspection shall be recorded item by item; marked on the external packaging of the product.

6.2.3.2 If problems are found, preventive and controlling measures shall be taken; the goods-storing side shall be informed to deal with the problems in a timely manner. Meanwhile, the goods shall not exit the warehouse as normal commodities.

6.2.3.3 In terms of goods that are close to the expiration date, a reminder shall be filled out and submitted to the goods-storing side.

## 7 Safe Operation

7.1 Operating personnel shall hold Post Qualification Certificate on the preservation of