

**Voluntary Report** – Voluntary - Public Distribution

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**Report Name:** China Notified Draft National Standard for Wheat

**Country:** China - People's Republic of

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**Report Category:** Grain and Feed, FAIRS Export Certificate Report, FAIRS Annual Country Report, FAIRS Subject Report, Food and Agricultural Import Regulations and Standards - Certification, Food and Agricultural Import Regulations and Standards - Narrative, WTO Notifications

**Prepared By:** FAS Beijing Staff

**Approved By:** Adam Branson

**Report Highlights:**

On February 8, 2021 China notified a draft revised National Standard for Wheat to the World Trade Organization as G/TBT/N/CHN/1538. The standard specifies the terms and definitions, classification, quality requirements, test methods, inspection rules, labelling, packaging, storage, and transportation requirements for wheat. Compared to the current standard, the revised standard revises certain terms and definitions, sensory requirements, physical and chemical indicators, and other technical requirements. China has not announced a proposed date of entry into force of the revised standard. Comments can be sent to China's TBT Enquiry Point at [tbt@customs.gov.cn](mailto:tbt@customs.gov.cn) by April 9, 2021. This report contains an unofficial translation of the draft standard.

## **BEGIN TRANSLATION**

### **National Standard Wheat (Draft for Comments)**

#### **Foreword**

This document is drafted in accordance with GB/T 1.1-2020 Directives for standardization. Part 1: Rules for the structure and drafting of standardizing documents.

This document replaces GB 1351-2008 Wheat. Compared with GB 1351-2008 Wheat, the main technical changes are as follows:

- The GB 2715 National Food Safety Standard Food and GB 13078 Feed Hygiene Standard in the normative reference documents have been deleted;
- The GB 5009.3 National Food Safety Standard - Determination of Moisture in Food in the normative reference documents has been deleted;
- The English terms of defected kernel, insect-bored kernel, diseased kernel, fusarium damaged kernel, impurities and screenings have been modified.
- The definitions of black point kernel, sprouted kernel, moldy kernel, impurities, organic impurities, inorganic impurities, color, odor and wheat hardness index have been modified.
- The term and definition of "heat-damaged kernel" have been added.
- The term and definition of "wheat with no use value" have been added.
- The expression of wheat classification has been modified, and "Notes" have been added to the classification of "mixed wheat".
- The "minerals" in the impurities in Table 1 is changed to "inorganic impurities";
- The "moisture content test" in the test method has been modified, and GB 5009.3 has been added as the basic method.
- The chapter of "Hygienic Requirements" has been deleted.

This document was proposed and centrally managed by the National Food and Strategic Administration.

Previous versions of standards replaced by this document are released as follows:

- GB 1351-1986, GB 1351-1999, GB 1351-2008.

# Wheat

## 1. Scope

This document specifies the terms and definitions, classification, quality requirements, test methods, test rules, labels and signs, packaging, storage and transportation requirements of wheat.

This document applies to commercial wheat purchased, stored, transported, processed and sold.

This document does not apply to special wheat varieties other than those specified in Chapter 4 Classification.

## 2. Normative references

The following documents are essential for the application of this document. For all dated reference documents, only the dated version is applicable to this document. For updated reference documents, the latest version (including all modifications) is applicable to this document.

GB 5009.3 National Standard for Food Safety-Determination of Moisture in Food

GB/T 5490 General Rules for Grains and Oilseeds Inspection

GB/T 5491 Inspection of Grains and Oilseeds - Methods for Sampling and Sample Reduction

GB/T 5492 Inspection of Grains and Oilseeds - Identification of Color, Odor and Taste of Grain and Oilseeds

GB/T 5493 Inspection of Grains and Oilseeds -Determination of Type Purity and Their Mixture

GB/T 5494 Inspection of Grains and Oilseeds - Inspection of Foreign Matter and Unsound Kernels of Grain and Oilseeds

GB/T 5497 Inspection of Grains and Oilseeds - Methods for Moisture Determination

GB/T 5498 Inspection of Grains and Oilseeds - Determination of Test Weight

GB/T 21304 Determination of Wheat Hardness - Hardness Index Method

## 3. Terms and definitions

The terms and definitions below are applicable to this document.

### 3.1 Test weight

Mass of wheat kernels per unit volume.

Note: expressed in grams/liter (g/L).

### 3.2 Defected kernel

Damaged but valuable wheat kernel.

Note 1: Includes insect-bored kernel, diseased kernel, heat-damaged kernel, broken kernel, sprouted kernel, and moldy kernel.

Note 2: Insect-bored kernel refers to the kernel that is bored by insects, which damages the embryo or endosperm.

Note 3: Diseased kernel; Mottled kernel refers to the kernel with disease spots on the surface, and the embryo or endosperm of which is damaged; Diseased kernel includes black point kernel and fusarium damaged kernel. Black point kernel refers to the kernel whose seed coat in the embryo or at other areas is obviously dark brown or black, the embryo or endosperm of which is damaged. Fusarium damaged kernel means that the kernel is shriveled and white, or the kernel surface is purple, or there is obvious pink mildew, with black cyst shell.

Note 4: Heat-damaged kernel refers to the kernel whose normal color is changed or is damaged due to heat production or heating by microorganisms or other reasons.

Note 5: Broken kernel refers to the kernel which is crushed and broken, which damages the embryo or endosperm.

Note 6: Sprouted kernel refers to the kernel whose sprout or young root does not break through the seed coat, but the seed coat in the embryo is broken, or whose sprout or young root breaks through the seed coat but does not exceed the length of the kernel.

Note 7: Moldy kernel refers to the kernel that has mold.

### **3.3 Impurities; useless material**

Other materials except wheat, and wheat with no use value.

Note 1: It includes screenings, inorganic impurities, and organic impurities.

Note 2: Screenings refer to materials passing through a round-hole screen with a diameter of 1.5 mm.

Note 3: Inorganic impurities refer to soil, sandstone, bricks and other inorganic materials.

Note 4: Organic impurities refer to different grains, wheat with no use value and other organic materials except wheat.

Note 5: Wheat with no use value refers to kernels that cannot be used as raw materials of wheat, including: completely discolored and deteriorated wheat, wheat with sprout length exceeding the kernel length, wheat with nematode disease, and wheat with smut.

### **3.4 Color and brightness**

The color and brightness of a batch of wheat under specified conditions.

### **3.5 Odor**

The odor of a batch of wheat under specified conditions.

### **3.6 Wheat hardness**

The ability of wheat kernel to resist deformation and breakage under external force.

### 3.7 Wheat hardness index

The mass fraction of the samples remained on the screen when the wheat samples are crushed under specified conditions, which is expressed as HI.

## 4. Classification

The wheat is classified according to the kernel hardness and the seed coat color as follows:

- 1) Hard white wheat: There are no less than 90% of kernels with white or yellowish-white seed coat, and the wheat hardness index is not less than 60.
- 2) Hard red wheat: There are no less than 90% of kernels with deep red or reddish-brown seed coat, and the wheat hardness index is not less than 60.
- 3) Soft white wheat: There are no less than 90% of kernels with white or yellowish-white seed coat, and the wheat hardness index is not higher than 45.
- 4) Soft red wheat: There are no less than 90% of kernels with deep red or reddish-brown seed coat, and the wheat hardness index is not higher than 45.
- 5) Mixed wheat: wheat that does not meet the requirements of 4.1 to 4.4.

Notes: Wheat with purple, black, and other color of seed coat is a special variety of wheat.

## 5. Quality requirements

See Table 1 for the quality indicators requirements of various wheat. The test weight is the grading indicator, and the third grade is medium.

Table 1 Quality requirements

| Grade     | Test weight (g/L) | Defected kernel / % | Impurities content / % |            | Moisture content / % | Color and odor |
|-----------|-------------------|---------------------|------------------------|------------|----------------------|----------------|
|           |                   |                     | Total                  | Including: |                      |                |
| 1         | $\geq 790$        | $\leq 6.0$          | $\leq 1.0$             | $\leq 0.5$ | $\leq 12.5$          | Normal         |
| 2         | $\geq 770$        |                     |                        |            |                      |                |
| 3         | $\geq 750$        |                     |                        |            |                      |                |
| 4         | $\geq 730$        |                     |                        |            |                      |                |
| 5         | $\geq 710$        |                     |                        |            |                      |                |
| Off-grade | $< 710$           | -                   |                        |            |                      |                |

Note: "-" indicates that there is no requirement.

## **6 .Testing methods**

- 6.1 Sampling and sample reduction shall be conducted according to GB/T 5491.
- 6.2 The color of the wheat skin shall be tested according to the "kernel color" in GB/T 5493.
- 6.3 The wheat hardness shall be tested according to GB/T 21304.
- 6.4 The color and odor shall be tested according to GB/T 5492.
- 6.5 The test weight shall be tested according to GB/T 5498.
- 6.6 The content of impurities and defected kernels shall be tested according to GB/T 5494. Inorganic impurities shall be tested according to the requirements of "6.1.4 Mineral Inspection" in GB/T 5394.
- 6.7 The moisture content shall be tested according to GB 5009. 3 or GB/T 5497. GB 5009.3 is the arbitration law.

## **7. Test rules**

- 7.1 General rules of tests shall be implemented according to GB/T 5490.
- 7.2 Test batch: wheat of the same kind, place of origin, harvest year, transportation unit, and storage unit.
- 7.3 Judgment rules: the test weight shall meet the requirements of corresponding grades in Table 1, and other indicators shall be implemented according to relevant national regulations.

## **8. Labels and signs**

The name, category, grade, place of origin and harvest year of the product shall be indicated in the package or accompanying documents.

## **9. Packaging, Storage and Transportation**

### **9.1 Packaging**

The packaging shall be clean, firm, without damage, sealed tightly and firmly, without leakage; It shall not bring pollution and abnormal odor to the product.

### **9.2 Storage**

It shall be stored in a clean, dry, rain-proof, moisture-proof, insect-proof, rat-proof and odor-free warehouse, and shall not be mixed with toxic and harmful substances or substances with high water content.

### **9.3 Transportation**

Shall use transport tools meeting the hygienic requirements, and attention shall be paid to prevent rain and pollution during transportation.

**Attachments:**

No Attachments.