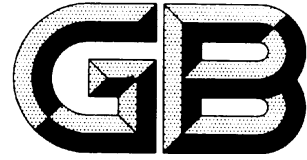


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**The National Standard of People's Republic of China**

GB 25190—2010

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**National food safety standard**  
**Sterilized Milk**

Issued on 26-03-2010

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Issued by the Ministry of Health  
of the People's Republic of China

## Preface

This standard replaced GB 19645-2005 Hygiene Standard of Pasteurization, sterilized milk and the part index of GB 5408.2-1999 Sterilized milk. In case of the index involved in GB 5408.2-1999, this standard shall prevail.

In comparison with GB 19645-2005, the major changes of this standard are as follows:

- The Hygiene Standard of pasteurized milk and sterilized pure milk is divided into three standards named pasteurized milk, sterilized milk and modified milk, and this standard is sterilized milk.
- The description of scope is modified;
- Terms and definitions are specified;
- Sensory requirement is modified;
- The fat requirements for skimmed milk product and partial skimmed milk product are cancelled;
- The protein requirement for ovine milk is added;
- The limits of Acid value in physical-chemical requirements is changed to the range of value;
- Residues limits of veterinary drugs is cancelled;
- Residues limits of pesticides is cancelled;
- The limits of contaminants is directly cited from GB2762;
- The limits of mycotoxins is directly cited from GB2761;
- The requirement for food additive is cancelled;
- The requirement for labelling is modified;

This standard replaces all previous standards, those issued editions are:

- GB 19645-2005.

# National food safety standard

## Sterilized Milk

### 1. Scope

This standard applies to whole milk, skimmed milk and part skimmed and sterilized milk.

### 2. Normative reference

The following normative documents are absolutely necessarily for the application of this standard. For dated references, only the dated edition of the normative document referred to applies. For undated references, the latest edition including all the modified notes of the normative document referred to applies.

### 3. Terms and definitions

#### 3.1 Ultra high-temperature milk

Ultra high-temperature milk means the liquid products that using raw bovine (or goat) milk as the ingredient with reconstituted milk added or not, when milk is continuous flowing, are heated to at least 132°C and held for a short time for sterilization, then aseptic filling etc.

#### 3.2 Retort sterilized milk

Retort sterilized milk means the liquid product that using raw bovine (or goat) milk as major ingredient with reconstituted milk added or not, with or without preheated, sterilized and so on after filling and seal.

### 4. Technical requirements

#### 4.1 Raw material requirements

4.1.1 Fresh milk: shall be in accordance with GB 19301.

4.1.2 Milk powder: shall be in accordance with GB 19644.

4.2 Sensory requirements are specified in Table 1 as below.

Table1. Sensory requirement

Item	Requirement	Test method
Color	Ivory white or pale yellow.	Add moderate test sample into a 50ml beaker, and observe the
Taste and aroma	Natural milk aroma, no abnormal flavour.	

Structure and appearance	Well-proportioned liquid, no coagulation, no precipitate, no foreign matter by eyes	color, structure and appearance of the test sample with nature daylight. Smell and taste after gargling with warm water.
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**4.3 Physical-chemical requirements: are specified in Table 2 as below.**

**Table 2 Physical-chemical requirements**

Item	Limits	Test method
Fat <sup>a</sup> /(g/100g) ≥	3.1	GB 5413.3
Protein/(g/100g)		
Bovine milk ≥	2.9	GB 5009.5
Ovine milk ≥	2.8	
Milk solids non fat /(g/100g) ≥	8.1	GB 5413.39
Acidity/(° T)		
Bovine milk	12~18	GB 5413.34
Ovine milk	6~13	
a: only applied to sterilized whole milk		

**4.4 Limits of contaminants**

The limits of contaminants shall be in accordance with GB 2762.

**4.5 Limits of Mycotoxins:**

The limits of Mycotoxins shall be in accordance with GB 2761.

**4.6 Microbiology requirements**

The microbiology requirements shall be in accordance with commercial sterilization and the sample shall be tested by the method of GB/T 4789.26.

**5. Others**

5.1 UHT milk only raw bovine (or ovine) milk as ingredient shall be marked "pure milk / dairy" in Chinese in the main display panel, closing to the position of product name. The font size of Chinese should not less than which for product

name, and the font height should not less than one-fifth of main display panel height.

5.2 The sterilized milk completely produced from milk powder shall be marked “reconstituted milk/dairy” in Chinese closing to the position of product name; the sterilized milk produced of raw bovine (or goat) partially added milk powder shall be marked “containing xx% reconstituted milk/dairy” in Chinese closing to the position of product name.

Note: “xx%” means the mass percentage of added milk powder in total milk solids of sterilized milk.