

# GB

## National Food Safety Standard

GB 25191-2010

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**National food safety standard**

**Modified milk**

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Ministry of Health of the People's Republic of China

## Foreword

This standard replaces GB 19645-2005 <Hygiene Standard of Pasteurized milk and Sterilized milk>, and part requirements involved in GB5408.1-1999 <Pasteurized milk> and GB 5408.2-1999<Sterilized milk>. Those relevant requirements in GB5408.1-1999 <Pasteurized milk> and GB 5408.2-1999<Sterilized milk> shall comply with the equivalents in this standard.

Compared with GB 19645-2005, the main modification is:

---The standard of <Hygiene Standard of Pasteurized milk and Sterilized milk> is divided into three standard as <Pasteurized milk> and <Sterilized milk> and <modified milk>. This standard is modified milk.

This standard replaces previous standard edition is:

-- GB 19645-2005

## Modified milk

### 1 Scope

This Standard applies to whole fat, part skimmed and skimmed modified milk.

### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, the parties reached an agreement in this standard were encouraged to research the possibility of using the latest version of these documents. For undated reference documents, the latest version applies to this standard.

### 3 Terms and definition

#### 3.1 modified milks

Use more than 80% cow or sheep milk or recombined milk as main materials, and other ingredients, add or not add food additives and nutritional fortification substances, through the process of Pasteurization or Sterilization or similar heat treatment, to produce liquid products.

### 4 Specifications

#### 4.1 Requirement of raw material

4.1.1 Raw milk: should meet the requirement of GB19301.

4.1.2 Other materials: should comply with the corresponding hygiene standard and related regulations.

#### 4.2 Sensory requirements

Should meet the requirement in table 1

Item	Requirements	Test methods
Color	Proper color of modified milk its own	Take sample with proper amount in 50 ml beaker, observe its color and texture under natural light. Smell and then taste after rinse mouth with warm water.
Taste and flavor	proper taste and flavor of modified milk its own , no off-flavor	
Texture	Liquid with good consistency, without clot, sediment which originate from ingredients is permissible , without visible foreign bodies.	

#### 4.3 Physical and chemical requirements

Should meet the requirement in table 2

Table 2 Physical and chemical requirements

Item	Requirements	Test method
Fat <sup>a</sup> /(g/100g) ≥	2.5	GB5413.3
Protein (g/100g)	2.3	GB5009.5
<sup>a</sup> Only apply to whole milk products.		

#### 4.4 Contaminates

It should meet the requirement in GB2762.

#### 4.5 Maximum limits for mycotoxin

It should meet the requirement in GB2761.

#### 4.6 Microbiological requirements

4.6.1 The products treated by UHT process should conform to commercial sterilization, and use standard GB4789.26 as test method.

4.6.2 The other kinds of product should meet the requirement in table 3.

Table 3 Microbiological requirements

Item	Sampling plan and requirements(if not specified, express as CFU/g or CFU/ml )				Test method
	n	c	m	M	
Aerobic plate count	5	2	50000	100000	GB4789.2
Coliforms	5	2	1	5	GB4789.3 Method 2
<i>Staphylococcus aureus</i>	5	0	0/25g(ml)	-	GB4789.10 Method 1
Salmonella	5	0	0/25g(ml)	-	GB4789.4
Sample preparation according to GB4789.1 and GB 4789.18.					

#### 4.7 Food additives and nutritional fortification substances

4.7.1 The quality of food additives and nutritional fortification substances should comply with the corresponding standard and related regulations.

4.7.2 Each kind of food additives or nutritional fortification substances used and its usage should conform to the regulation in GB2760 and GB 14880.

#### 5 Others

5.1 The product made from 100% milk powder as raw material should be labeled as ‘recombined milk’ in the place next to its product name. The product partly made from milk powder as raw material should be labeled as ‘contain ××% recombined milk’, which ‘××%’ is the percentage of milk powder account to total milk solid in modified milk.

5.2 The Chinese character of “recombined milk” and the product name should be indicated in the same page of package; “recombined milk” should be printed distinctly and the font size should not less than that of its product name, and the height of font should not less then 1/5 of the height of the whole page lay out.