

ICS 67.160.10

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National Food Safety Standard of P.R.China

GB xxxx—xxxx

Process(ed) Cheese

(Draft)

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Preface

This standard corresponds to the following standards of Codex Alimentarius Commission (CAC): Codex Stan 285 -1978 *Codex general standard for named variety process(ed) cheese and spreadable process(ed) cheese*, Codex Stan 286-1978 *Codex general standard for process(ed) cheese and spreadable process(ed) cheese*, Codex Stan 287-1978 *Codex general standard for process(ed) cheese preparations (process(ed) cheese food and process(ed) cheese spread)*. The consistency level of this standard with Codex Stan 285 –1978 and Codex Stan 286 -1978, Codex Stan 287-1978 is non-equivalent. Microorganisms correspond to the relevant provisions of cheese in EU 1441/2007, COMMISSION REGULATION (EC) No 1441/2007 of 5 December 2007. Its consistency level with this standard is non-equivalent.

This standard was proposed by and is under the jurisdiction of Ministry of Health of P.R.China.

Process(ed) Cheese

1. Scope

This standard specifies terms and definitions, technical requirements as well as requirements on food additive and nutritional fortification, manufacturing process, packaging, labeling, storage and transportation and inspection method of process(ed) cheese.

This standard applies to the manufacture, circulation, supervision and administration.

2. Standard citing Documents

The provisions contained in the following standards, through quotation in this text, constitute provisions of this standard. At the time of publication, all the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to discuss the possibility of applying the latest editions of the standards indicated below.

GB 2760 Hygienic standards for uses of food additives

GB 2761 Maximum levels of mycotoxins in foods

GB 2762 Maximum levels of contaminants in foods

GB 4789.2 Microbiological examination of food hygiene – Detection of Aerobic plate count

GB 4789.3 Microbiological examination of food hygiene – Detection of coliform bacteria

GB 4789.4 Microbiological examination of food hygiene - Examination of Salmonella

GB 4789.15 Microbiological examination of food hygiene- Detection of molds and yeasts

GB 4789.18 Microbiological examination of food hygiene- Examination of milk and milk products

GB 4789.30 Microbiological examination of food hygiene - Examination of listeria monocytogenes

GB 4789.37 Microbiological examination of food hygiene - Detection of staphylococcus aureus

GB 5009.3 Determination of moisture in foods

GB XXXX Determination of fat in infant food and dairy product

GB XXXX Cheese

GB 7718 General Standard for the labeling of prepackaged foods

GB 12693 Standards for good manufacturing practice for dairy products

GB 13432 General Standard for the labeling of prepackaged foods for special dietary uses

GB 14880 Hygienic Standard for the use of nutritional fortification substances in foods

3 Terms and Definitions

3.1 Process(ed) cheese

Process(ed) cheese are made by mixing, melting and emulsifying with the aid of heat and emulsifying agents chesse (minimum 15%) with or without adding other ingredients.

4 Technical Requirements

4.1 Requirements of raw materials

4.1.1 Cheese: in accordance with the provisions of GB xxxx.

4.1.2 Other raw materials: in accordance with relevant standards and regulations.

4.2 Requirement for Sensory properties

It should be in accordance with the provisions in Table 1

Table 1 Sensory Property

Items	Requirements
Color	Uniform color
Structure	The product shall have a smooth surface with homogeneous and fine structure. The visible particles are only allowed for ingredients related to its flavor and there should be no visible impurities.
Flavor and Odor	Easily melt in the mouth with rich and creamy mouthfeel and typical cheese flavor. Same type of flavor is allowable.

4.3 Physical and chemical properties

It shall comply with the provisions in Table 2. The content of dry matter should be calculated in accordance with formula (1) and express in %. Fat content in dry matter is calculated in accordance with formula (2) and express in %.

Table 2 Physical and chemical property

Fat content in dry matter(X_2)/(%)	Minimum content of dry matter (X_1)/(%)
$60.0 \leq X_2 \leq 75.0$	44
$45.0 \leq X_2 < 60.0$	41
$25.0 \leq X_2 < 45.0$	31
$10.0 \leq X_2 < 25.0$	29
$X_2 < 10.0$	25

$$\text{Content of dry matter\%: } X_1 = \frac{\text{Total mass of process(ed) cheese(g)} - \text{moisture mass in process(ed) cheese(g)}}{\text{Total mass of process(ed) cheese(g)}} \times 100 \quad (1)$$

$$\text{Fat content in dry matter\%: } X_2 = \frac{\text{Fat mass in process(ed) cheese(g)}}{\text{Total mass of process(ed) cheese(g)} - \text{moisture mass in process(ed) cheese(g)}} \times 100 \quad (2)$$

4.4 Maximum residue of pollutants

In accordance with provisions of GB2762

4.5 Maximum residue of Mycotoxins

In accordance with provisions of GB2761

4.6 Microbiological index

In accordance with provisions in Table 3

Table 3 Microorganism Index

Item	Sampling scheme and limited quantity
Total plate count	n=5,c=2,m=100 cfu/g, M=1000 cfu/g
Coliform	n=5,c=2,m=100 cfu/g,M=1000 cfu/g
Mold ≤	50 cfu/g
Yeast ≤	50 cfu/g
Salmonella	n=5,c=0,m=0/25g
Staphylococcus aureus	n=5,c=2,m=100 cfu/g, M= 1000 cfu/g
Listeria monocytogenes	n=5,c=0,m=0/25g

5 Food Additive and Nutrition enhancer

5.1 Qualities of food additive and nutrition enhancer should comply with the corresponding standards and requirements.

5.2 The varieties and dosage of food additive and nutrition enhancer applied should comply with the provisions of GB 2760 and GB 14880.

6 Production Process

In accordance with provisions of GB 12693

7 Packaging

Packaging container and material should comply with the corresponding standards and requirements.

8 Labeling

In accordance with provisions of GB 7718 or GB 13432 and relevant national laws and regulations

9 Storage and Transportation**9.1 Storage**

Products should be stored in the places with temperature of 2℃~12℃, while UHT products can be stored at room temperature. Shall be kept away from poisonous, harmful, smelly, volatile and corrosive substances.

9.2 Transportation

Avoid sunshine and rain during the transportation. Do not transport in combination with poisonous, harmful and smelly articles that may affect product quality. The transportation temperature should be 2℃ ~ 12℃.

10 Inspection Method

10.1 Sensory index

10.1.1 Color, structure and impurity: Take the sample, remove its package, put it on the white paper, observe its color, structure and if any visible impurities under natural light.

10.1.2 Flavor and odor: Firstly smell the odor of sample, and then taste its flavor.

10.2 Physical and chemical index

10.2.1 Moisture: Determine in accordance with the method specified in GB 5009.3.

10.2.2 Fat: Determine in accordance with the method specified in GB XXXX.

10.3 Microorganism index

For the inspection of microorganism index, the apparatus, materials, sampling procedure and sample treatment should comply with the provisions of GB 4789.18.

10.3.1 Total plate count: Inspect in accordance with the method specified in GB 4789.2.

10.3.2 Coliform: Inspect in accordance with direct counting method in GB 4789.3.

10.3.3 Yeast and mold: Inspect in accordance with the method specified in GB4789.15.

10.3.4 Salmonella: Inspect in accordance with the method specified in GB 4789.4

10.3.5 Staphylococcus aureus: Inspect in accordance with the method specified in GB 4789.37.

10.3.6 Listeria monocytogenes: Inspect in accordance with the method specified in GB/T 4789.30.
