

Voluntary Report – Voluntary - Public Distribution

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Report Name: National Food Safety Standard High Temperature Sterilized Milk Open for Public Comments

Country: China - People's Republic of

Post: Beijing

Report Category: FAIRS Subject Report, Sanitary/Phytosanitary/Food Safety, Dairy and Products, Trade Policy Monitoring

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Report Highlights:

On December 11, 2023, the People's Republic of China (PRC) Secretariat of National Food Safety Standard Review Committee of the National Health Commission (NHC) published an announcement soliciting public comments on 21 national food safety standards. This report contains an unofficial translation of the new standard for high-temperature sterilized milk. This food safety standard has not been notified to the World Trade Organization (WTO). Comments must be submitted by February 10, 2024.

Report Summary:

On December 11, 2023, the NHC released an Announcement from the Secretariat of the National Food Safety Standard Review Committee on Soliciting Public Comments of 21 National Food Safety Standards. Please refer to [FAS GAIN Report CH2023-0188](#) for the translation of the Announcement and list of the standards open for public comments.

The National Food Safety Standard for High Temperature Sterilized Milk is a new PRC standard regulating the processing and testing methods for this product with extended shelf life (ESL). The thermal processing temperature and time, and evaluation methods of the products are different than traditional pasteurized milk or UHT sterilized milk.

This report contains an unofficial translation of the new standard. After the domestic comments period ends in China, the standard is expected to be notified to the WTO. As of January 21, 2024, the draft standard has not been WTO notified and relevant stakeholders should conduct their own review of the notification.

Written comments must be submitted to the Secretariat via the national food safety standards management information system (https://sppt.cfsa.net.cn:8086/cfsa_aiguo) before February 10, 2024.

BEGIN UNOFFICIAL TRANSLATION

National Food Safety Standard High Temperature Sterilized Milk (Draft for Comments)

1. Scope

This standard applies to whole, skimmed, and partially skimmed high-temperature sterilized milk.

2. Terms and Definitions

2.1 High-temperature sterilized milk

Liquid products made from only a single variety of raw milk and produced through high temperature sterilization (see Appendix A) and other production processes.

3. Technical Requirements

3.1 Raw material requirements

Raw milk should comply with the regulations of GB 19301.

3.2 Sensory requirements

Sensory requirements should comply with Table 1.

Table 1: Sensory Requirements

Item	Requirements	Testing Methods
Color	Milky white and slightly yellow	Take an appropriate amount of sample and place it in a beaker of no less than 50mL and observe the color and state under natural light. Smell it, then rinse your mouth with warm water and taste it.
Flavor and Smell	Fragrance of milk and no abnormal smell	
Status	It is a uniform liquid with no clots, no sediments, and no foreign objects visible.	

3.3 Physical and chemical indicators

3.3.1 The physical and chemical indicators for high temperature sterilized cow milk should comply with the requirements in Table 2.

Table 2: Physical and Chemical Indicators for High Temperature Sterilized Milk

Item	Indicators	Testing Methods
Fat ^a /(g/100g) \geq	3.2	GB 5009.6
Protein/ (g/100g) \geq	2.9	GB 5009.5
Non-fat solid/ (g/100g) \geq	8.1	GB 5413.39
Acidity/ (°T)	10-18	GB 5009.239

^a only applicable to whole high temperature sterilized cow milk.

3.3.2 Physical and chemical indicators of high temperature sterilization milk of other kinds should comply with the requirements of Table 3.

Table 3: Physical and Chemical Indicators for High Temperature Sterilization of Other Types of Milk

	Item	Indicators	Testing Methods
Fat ^a /(g/100g) ≥	Goat milk	3.1	GB 5009.6
	Buffalo milk	5.5	
	Yak milk	5.0	
	Camel milk	3.5	
	Horse milk	0.4	
	Donkey milk	0.25	
Protein/ (g/100g) ≥	Goat milk	2.8	GB 5009.5
	Buffalo milk	3.8	
	Yak milk	3.8	
	Camel milk	3.3	
	Horse milk	1.4	
	Donkey milk	1.5	
Non-fat solid/ (g/100g) ≥	Goat milk	8.1	GB 5413.39
	Buffalo milk	8.8	
	Yak milk	9.0	
	Camel milk	8.1	
	Horse milk	7.0	
	Donkey milk	7.5	
Acidity/ (°T)	Goat milk	6-14	GB 5009.239
	Buffalo milk	10-18	
	Yak milk	16-22	
	Camel milk	16-24	
	Horse milk	≤18	
	Donkey milk	≤6	
^a only applicable to high temperature sterilized whole milk of other types			

3.4 Contaminant and mycotoxin limits

3.4.1 Contaminant limits should comply with the provisions of GB 2762.

3.4.2 Mycotoxin limits should comply with the provisions of GB 2761.

3.5 Microbial Limits

3.5.1 Pathogenic bacteria limits should comply with the provisions of GB 29921.

3.5.2 Microbial limits should comply with the provisions of Table 4.

Table 4: Microbial Limits

Item	Sampling proposal ^a and limits				Testing Methods
	n	c	m	M	
Total bacteria/(CFU/mL)	5	2	5.0*10 ²	1.0*10 ³	GB 4789.2
Coliform/(CFU/mL)	5	2	1	5	GB 4789.3

^a Sampling and handling of samples should follow GB 4789.1 and GB 4789.18.

4. Other

“High Temperature Sterilization X Milk” should be marked on the main display side of the product packaging.

Appendix A

Requirements for high temperature sterilization and other equivalent thermal processing methods

A.1 Temperature and time requirements for high temperature sterilization

High temperature sterilization refers to a thermal disinfection operation that effectively kills pathogenic microorganisms while producing chemical, physical, and sensory changes that are higher than pasteurization but lower than the degree of complete sterilization. Sterilization operations should ensure that one of the temperature and time requirements shown in Table A.1 is achieved and it is maintained at or above that temperature for at least the corresponding time, or other equivalent thermal processing method is used.

Table A.1: Temperature and Time Requirements for High Temperature Sterilization

Temperature	Time
115 °C	20s
120 °C	15s
130 °C	2s

A.2 Equivalence evaluation of processing methods of high temperature sterilized milk

The equivalence evaluation of processing methods of high temperature sterilized milk should comply with the requirements of Table A.2.

Table A.2: Equivalence Evaluation Requirements for Processing Methods of High Temperature Sterilized Milk

Item	Indicators	Testing Methods
Alkaline Phosphatase	Negative	NY/T 3799
Furosine (mg/100g protein) ≤	100.0	NY/T 939

Note: should be sampled and tested after processing.

END TRANSLATION

Attachments:

No Attachments.