National Standard of the People’s Republic of China

GB 19645-2010

National Food Safety Standard
Pasteurized Milk

食品安全国家标准
巴氏杀菌乳

• Date of Publication: 2010-03-26
• Date of Implementation: 2010-12-01
• Issued by: Ministry of Health

DISCLAIMER: The English version is an unofficial translation of the original in Chinese for information and reference purposes only. In case of a discrepancy the Chinese original standard will prevail.
Foreword

This standard supersedes GB 19645-2005 Hygienic Standard for Pasteurized and Sterilized Milk and part of the indexes in GB 5408.1-1999 Pasteurized Milk. Compliance with this standard will take precedence in requirements shared by both GB 19645-2010 and GB 5408.1-1999.

Comparing with GB 19645-2005, main changes are listed as follows:

— Hygienic Standard for Pasteurized and Sterilized Milk is divided into three separate standards: Pasteurized Milk (this standard), Sterilized Milk and Modified Milk;
— Description of Scope is modified;
— Terms and Definition is defined;
— Sensory Requirements are modified;
— Fat requirements for skimmed and partially skimmed products are removed;
— Protein requirements for goat milk are added;
— Acidity requirements listed in “Physical-Chemical Index” are changed to range of value;
— Veterinary drug residue index is removed;
— Pesticide residue index is removed;
— Contaminant limits will directly refer to GB 2762;
— Mycotoxin limits will directly refer to GB 2761;
— Representation of microorganism index is revised;
— Requirements for food additives are removed;
— Labeling requirements are amended.

The superseded former versions are:
— GB 19645-2005.
National Food Safety Standard
Pasteurized Milk

1. Scope
This standard applies to whole, skimmed and partially skimmed pasteurized milk.

2. Normative references
The normative references 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. For undated reference documents, the latest version (including all its amendments) is applicable to this standard.

3. Terms and definitions
3.1 Pasteurized milk
Liquid products made of raw milk or goat milk through processes such as pasteurization.

4. Technical requirements
4.1 Ingredient Requirements: Raw milk should comply with GB 19310.
4.2 Sensory Requirements: Should comply with requirements in Table 1.

Table 1 Sensory Requirements

<table>
<thead>
<tr>
<th>Items</th>
<th>Requirements</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Milky white or yellowish</td>
<td>Take appropriate amount of sample to 50mL beaker, observe the color and texture under natural light, smell and taste after rinsing mouth with warm water.</td>
</tr>
<tr>
<td>Taste and Aroma</td>
<td>Possess milk aroma without any abnormal odor</td>
<td></td>
</tr>
<tr>
<td>Texture and Appearance</td>
<td>Liquid with even texture, without any unusual coagulation or visible foreign matters</td>
<td></td>
</tr>
</tbody>
</table>

4.3 Physicochemical requirements
Physicochemical requirements should comply with Table 2.

Table 2 Physicochemical requirements

<table>
<thead>
<tr>
<th>Item</th>
<th>Index</th>
<th>Testing Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fat ^a / (g/100g) ≥</td>
<td>3.1</td>
<td>GB 5413.3</td>
</tr>
<tr>
<td>Protein/ (g/100g)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cow milk ≥</td>
<td>2.9</td>
<td>GB 5009.5</td>
</tr>
<tr>
<td>Goat milk ≥</td>
<td>2.8</td>
<td></td>
</tr>
<tr>
<td>Milk Solid Non-Fat / (g/100g)</td>
<td>8.1</td>
<td>GB 5413.39</td>
</tr>
<tr>
<td>Acidity / (ºΤ)Cow milk ≥</td>
<td>12-18</td>
<td>GB 5413.34</td>
</tr>
<tr>
<td>Goat milk ≥</td>
<td>6-13</td>
<td></td>
</tr>
</tbody>
</table>

^a only applicable to whole pasteurized milk.
4.4 Contaminant Limits: Should comply with the requirements in GB 2762.

4.5 Mycotoxin Limits: Should comply with the requirements in GB 2761.

4.6 Microorganism Limits: Should comply with requirements listed in Table 3.

<table>
<thead>
<tr>
<th>Item</th>
<th>Sampling plan$^a$ and limits (if not specified, in CFU/g or CFU/ml)</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>c</td>
</tr>
<tr>
<td>Total Bacterial Count</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Coliforms</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Staphylococcus aureus</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Salmonella</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

$^a$ The analysis and treatment of samples should conform to GB 4789.1 and GB 4789.18.

5. Others

5.1 Chinese characters “鲜(羊)牛奶” or “鲜(羊)牛乳” (fresh milk or dairy respectively) should be indicated close to the product name on the principal display panel. The font size of the Chinese characters should be no smaller than that of the product name, and the font height should be no less than 1/5 of the display panel.