



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

**GB 25595-2010**

---

**National Food Safety Standard**

**Lactose**

**食品安全国家标准**

**乳糖**

- Date of Publication:2010-12-21
- Date of Implementation:2011-02-21
- 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.*

# National Food Safety Standard

## Lactose

### 1. Scope

This standard is applicable to edible lactose which is crystallized from whey with the technical process of drying and grinding.

### 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

#### Lactose

The carbohydrates extracted from whey, which exist as the state of anhydrous or monohydrate crystal water, or combined existing as a mixture

### 4. Technical Requirements

**4.1 Requirements of raw materials: cheese whey or casein whey is permitted to use.**

**4.2 Organoleptic requirements: should meet the stipulations in Table 1.**

**Table 1 Sensory Requirements**

Item	Requirements	Test method
Color	White to light yellow	Take appropriate amount of sample into white tray; inspect the color and texture under natural light, and smell.
Taste and odor	Slightly sweet and odorless	
Texture	Crystal or powdery crystal	

**4.3 Physicochemical index: should meet the requirements in Table 2.****Table 2 Physicochemical Index**

<b>Item</b>	<b>Index</b>	<b>Test method</b>
Lactose <sup>a</sup> (in dry weight)/(g/100g) ≥	99.0	-
Water content/(g/100g) ≤	6.0	GB 5009.3-2010 Karl Fischer Method
Ash content/(g/100g) ≤	0.3	GB 5009.4
pH/(10% aqueous solution)	4.5-7.0	Weigh 10g lactose into a 100mL beaker; add distilled water to prepare 10% water solution, and determine the pH value with pH metering equipment.
<sup>a</sup> Lactose content is calculated as (100-water content-ash content)/(100-water content)		