

Article 3. Specifications for Long Shelf-life Foods

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1. Canned & Bottled Food

"Canned & Bottled Food" is the product which shall be degassed at appropriate temperature and sealed in order to secure the conservation of product.

1) Manufacturing and Processing Standards

- (1) Sterilization shall be thermally processed in a way that the center temperature of product is 120°C for 4 minutes or in an equivalent or more effective way.
- (2) Weak acid product, whose pH is more than 4.5, is marked by label that indicates product contents, processing place and processing date, and the record about disinfection treatment shall be kept in documentation
- (3) Acidic product, of which pH is not more than 4.5, can be normally sterilized at less than 90°C.
- (4) In order to keep the storage property, product shall be disinfected or sterilized by a appropriate method according to its characteristics and then chilled by a proper method in order to prevent product contents from being discolored and restrain thermophilic bacteria from being proliferated.

2) Specification

- (1) Appearance : The container or closure shall not be swelled or deformed. The contents shall have the unique color and shall not have strange odor or taste.
- (2) Degree of vacuum (cmHg) : Appropriate degree of vacuum (except one-touch canned product)
- (3) Tin (mg/kg) : Not more than 150 (but, acidic canned food is not more than 200)
- (4) Bacteria : No bacterial growth

2. Retort Food

"Retort food" means the food product made by molding the single-layer plastic film, metal foil, or its multi-layered material in a pouch or other appropriate shapes, filling molded container with the manufactured, processed, or cooked food, sealing them, and then, performing heat sterilization or other sterilization treatment.

1) Manufacturing and Processing Standards

- (1) Product shall be sterilized in a suitable way to its characteristics in order to secure storage ability after sealing.
However, product with more than 4.5 pH and moisture activity over 0.94 shall be sterilized in a way

that the center temperature of the product stands at 120° for 4 minutes or in an equivalent or more effective way.

(2) After sterilization, product shall be chilled by a proper method in order to prevent product contents from being discolored and restrain thermophilic bacteria from being proliferated.

(3) Preservatives shall not be used in any purpose.

2) Specification

(1) Appearance : The product shall not be swelled or deformed. The contents shall have unique taste, color, and physical properties and shall not have strange odor or taste.

(2) Bacteria : No bacterial growth

(3) Tar color : No detected

3. Frozen food

"Frozen food" means a food made by filling the manufactured, processed, cooked food into container and packaging materials after freezing treatment for the purpose of long-term storage.

(1) Frozen food not requiring heating process before consumption : Frozen food that can be consumed without a separate heating process.

(2) Frozen food requiring heating process before consumption : Frozen food that can be consumed only after a separate heating process.

1) Manufacturing and Processing Standards

(1) Product before chilling shall be sterilized in a method, in which the temperature at the center of the product is not less than 63 °C for 30 minutes, or the equivalent.

2) Specifications

Items	Types	Frozen food not requiring heating before consumption	Frozen food requiring heating before consumption	
			Heated food before freezing	Not-heated food before freezing
(1) Bacterial counts		Not more than 100,000/g (except fermented products or those added with lactic acid bacteria)	Not more than 100,000/g (except fermented products or those added with lactic acid bacteria)	Not more than 3,000,000/g (except fermented products or those added with lactic acid bacteria)
(2) Coliform group		Not more than 10 /g	Not more than 10 /g	—
(3) E. coli		—	—	Negative
(4) Lactic acid bacteria		Not less than labeled count (if only products added with lactic acid bacteria)		