Annex 8 to SanPiN
2.3.2.1078-01, approved by
Resolution No. 36 of the
Chief State Sanitary
Inspector of the RF dated
November 14, 2001

HYGIENIC REQUIREMENTS FOR SAFETY OF CANNED FOOD PRODUCTS

Depending on the composition of a canned food product (canned food), the value of the active acidity (pH) and a dry substances content the canned foods are divided into 5 groups: A, B, C, D, E, F. The canned products of groups A, B, C, D and F refer to the fully canned food and group E - to semicanned foods.

Drinking dairy products (milk, cream, desserts etc.), subjected to various ways of thermophysical treatment and aseptic filling, form a separate group of sterilized products.

The canned foods for children and dietic nourishment are divided into the same groups as stated above.

Food products sealed in airtight containers, subjected to heat treatment ensuring the microbiological stability and safety of the product during its storage and sale in standard conditions (not in the refrigerator) shall be referred to the fully canned foods.

Food products sealed in airtight containers subjected to heat treatment ensuring the death of not thermoresistant asporogenous microflora, reducing the number of spore-forming microorganisms and ensuring the microbiological stability and safety of the product within a limited shelf life at temperatures of 6 Celsium degrees and below shall be referred to the semicanned foods.

The canned foods are divided into the following groups:

- Group A - canned food products with pH of 4.2 and above, as well as vegetable, meat, meat and vegetable, fish and vegetable and fish canned products with not-limited acidity, prepared without addition of acid; fruit drinks, juices and puree from apricots, peaches and pears with pH 3.8 and above, condensed sterilized canned milk, canned foods with a complex composition of the raw materials (fruit and berry, fruit and vegetable and vegetable with milk component);
- Group B - canned tomato products:

a) unconcentrated tomato products (canned plain tomatoes, tomato drinks) with dry substances content of less than 12%;

b) concentrated tomato products with dry substances content 12% and more (tomato paste, tomato sauce, ketchup etc.);

- Group C - canned subacid vegetable marinades, juices, salads, vinaigrettes and other products with pH 3.7–4.2, including canned cucumbers, vegetable and other canned foods with adjusted acidity;
- Group D - canned vegetables with pH below 3.7; fruit and fruit and berry pasteurized canned foods; canned foods for public catering with sorbic acid and pH below 4.0; canned apricots, peaches and pears with pH below 3.8; vegetable juices with pH below 3.7; fruit (citrus) and fruit and berry juices, including juices with sugar, natural and pulpy, concentrated, pasteurized juices; canned juices from apricots, peaches and pears with pH 3.8 and below; beverages and concentrated beverages on the vegetable basis with pH 3.8 and below packaged by aseptic filling;
- Group E - pasteurized meat, meat and vegetable, fish and fish and vegetable canned products (bacon, salted and smoked bacon, sausages, ham etc.);
- Group F - pasteurized carbonated fruit juices and carbonated fruit drinks with pH 3.7 and below.

Taking of samples of canned foods and their preparation for laboratory research for compliance with the safety requirements according to the microbiological indicators shall be carried out after their inspection and sanitary processing, leakage check, thermostatting of the canned foods and the evaluation of the canned foods external appearance after the thermostatting.

Table 1

Microbiological Safety Indicators (Industrial Sterility) of Fully Canned Foods of Groups A and B <*>

No.	Microorganisms Detected in Canned Food	General Purpose Canned Foods	Canned Foods for Children and Dietic Nourishment
1	2	3	4
1.	Spore-forming mesophilic aerobic and facultative anaerobic microorganisms of Group B. subtilis	Meet the requirements of industrial sterility. In case of detection of such microorganisms their amount shall not be more than 11 cells in 1 g (cm^3) of the product.	
2.	Spore-forming mesophilic aerobic and facultative anaerobic microorganisms of Group B. cereus and (or) B. polymyxa	Do not meet the requirements of industrial sterility	
3.	Mesophilic clostridia	Meet the requirements of industrial sterility, if the detected Mesophilic clostridia are not referred to C. botulinum and (or) C. perfringens. In case of detection of Mesophilic clostridia their amount shall not be more than 1 cell in 1 g (cm^3) of product.	Do not meet the requirements of industrial sterility if detected in 10 g (cm^3) of the product
4.	Non-spore-forming microorganisms and (or) mold mushrooms and (or) yeast	Do not meet the requirements of industrial sterility	
5.	Mold mushrooms, yeast, lactic acid microorganisms (at seeding on these groups)		Do not meet the requirements of industrial sterility
6.	Spore-forming thermophilic anaerobic, aerobic and facultative anaerobic microorganisms	Meet the requirements of industrial sterility, but the storage temperature shall not be above 20 Celsius degree.	Do not meet the requirements of industrial sterility

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<*> For condensed sterilized canned milk the assessment of the industrial sterility shall be carried out in accordance with the effective state standard.

Table 2

Microbiological Safety Indicators (Industrial Sterility) of Fully Canned Foods of Group C and D

No.	Microorganisms Detected in Canned Foods	Group C	Group D
1.	Gas-producing spore-forming mesophilic aerobic and facultative anaerobic microorganisms of Group B. polymyxa	Do not meet the requirements of industrial sterility	Not detected
2.	Nongas-producing spore-forming mesophilic aerobic and facultative anaerobic microorganisms	Meet the requirements of industrial sterility at detection of these microorganisms in the amount of not more than 90 CFU in 1g (cm^3) of product	Not detected
3.	Mesophilic clostridia	Meet the requirements of industrial sterility, if the detected mesophilic clostridia are not referred to C. botulinum and (or) C. perfringens. In case of detection of mesophilic clostridia their amount shall not be more than 1 cell in 1 g (cm^3) of product.	Not detected
4.	Non-spore-forming microorganisms and (or) mold mushrooms and (or) yeast	Do not meet the requirements of industrial sterility	

Table 3

Microbiological Safety Indicators (Industrial Sterility) of Canned Foods of Group F

No.	Indicators	Permissible Level Meeting the Industrial Sterility Requirements
1.	Quantity of mesophilic aerobic and facultative anaerobic microorganisms (QMAFAnM)	Not more than 50 CFU/g (cm^3)
2.	Lactic acid microorganisms	Not allowed in 1 g (cm^3) of product
3.	Colibacillus group bacteria (CGB, coliforms)	Not allowed in 1000 g (cm^3) of product
4.	Yeast	Not allowed в g (cm^3) of product
5.	Mould	Not more than 50 CFU/g (cm^3)

Table 4

Microbiological Safety Indicators (Industrial Sterility) of Semicanned Foods of Group E

No.	Indicators	Permissible Level Meeting the Industrial Sterility Requirements
1.	Quantity of mesophilic aerobic and facultative anaerobic microorganisms (QMAFAnM)	Not more than 2 x 1E2 CFU/g(cm^3)
2.	Colibacillus group bacteria (CGB, coliforms)	Not allowed in 1 g (cm^3) of product
3.	B. cereus	Not allowed in 1 g (cm^3) of product
4.	Sulfite-reducing clostridia	Not allowed in 0.1 g (cm^3) of product <*>
5.	S. aureus	Not allowed in 1 g (cm^3) of product
6.	Pathogenic, including salmonella	Not allowed in 25 g (cm^3) of product

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<*> For fish semicanned foods not allowed in 1.0 g (cm^3) of product.

Table 5

Microbiological Safety Indicators (Industrial Sterility) of Drinking Sterilized Milk and Cream and other Milk-based Products of Aseptic Filling

No. п/п	Indicators	Conditions and Permissible Levels Meeting the Industrial Sterility Requirements
1.	Thermostatic holding at 37°C for 3-5 days	Absence of visible defects and signs of spoilage (package swelling, change in appearance etc.)
2.	Acidity, °T <*>	Change of titrated acidity of not more than by 2°T
3.	Quantity of mesophilic aerobic and facultative anaerobic microorganisms <*>	Not more than 10 CFU/g (cm^3)
4.	Microscope slide	Absence of bacterium cells
5.	Organoleptic property	Absence of change in taste and consistence

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<*> Shall be determined at sanitary and epidemiological expertise, at control of children and dietary food products and repeated researches.

ConsultantPlus: note.
The Annex was not submitted for registration to the Ministry of Justice of the Russian Federation.