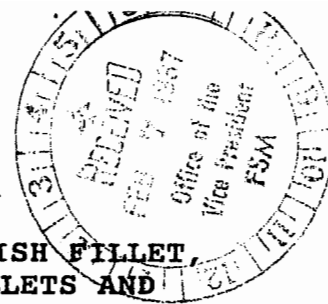


FEDERATED STATES OF MICRONESIA
DEPARTMENT OF HEALTH SERVICES
REGULATIONS FOR QUICK FROZEN BLOCKS OF FISH FILLET,
MINCED FISH FLESH AND MIXTURES OF FILLETS AND
MINCED FISH FLESH



DHS REGULATIONS NO. 6

1. SCOPE

This standard applies to quick frozen blocks of cohering fish flesh, prepared from fillets or minced fish flesh or a mixture of fillets and minced fish flesh, which are intended for further processing.

2. DESCRIPTION

2.1 Product Definition

Quick frozen blocks are rectangular or other uniformly shaped masses of cohering fish fillets, minced fish or a mixture thereof, which are suitable for human consumption, comprising.

- i. a single species; or
- ii. a mixture of species with similar sensory characteristics.

2.1.1 Fillets are slices of fish of irregular size and shape which are removed from the carcass by cuts made parallel to the back bone and pieces of such fillets, with or without the skin.

2.1.2 Minced fish flesh used in the manufacture of blocks are particles of skeletal muscle which have been separated from and are essentially free from bones and skin.

2.2 Process Definition

The product after any suitable preparation shall be subjected to a freezing process and shall comply with the conditions laid down hereafter. The freezing process shall be carried out in appropriate equipment in such a way that the range of temperature of maximum crystallization is passed quickly. The quick freezing process shall not be regarded as complete unless and until the product temperature has reached 18 degrees Celsius or colder at the thermal center after thermal stabilization. The product shall be maintained under conditions that will maintain the quality during transportation, storage and distribution.

Industrial repacking or further processing of intermediate quick frozen material under controlled conditions which maintain the quality of the product followed by the reapplication of the quick freezing process is permitted.

These products shall be processed and packaged so as to minimize dehydration and oxidation.

2.3 Presentation

Any presentation of the product shall be permitted provided that it:

2.3.1 meets all requirements of this standard, and

2.3.2 is adequately described on the label to avoid confusing or misleading the consumer.

2.3.3 Blocks may be presented as boneless, provided that boning has been completed including the removal of pin-bones.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Fish

Quick frozen blocks shall be prepared from fillets or minced flesh of sound fish which are of a quality fit to be sold fresh for human consumption.

3.2 Glazing

If glazed, the water used for glazing or for preparing glazing solutions shall be of potable quality. Standards of potability shall be less than those contained in the latest edition of the WHO "International Guidelines for Drinking Water Quality".

3.3 Other Ingredients

All other ingredients used shall be of food grade quality and conform to all applicable Codex standards.

3.4 Final Ingredients

Defects and tolerances for final product requirements described in 3.4.1 through 3.4.4 are described in Section 8 of this standard. Products shall be examined by the methods given in Section 7.

3.4.1 Appearance

The final product shall be reasonably free from deep dehydration.

3.4.2 Odour/Flavour

The product shall be free from objectionable gelatinous and pastry conditions.

3.4.4 Foreign and Objectionable Matter

The final product shall be free from foreign matter and in packs designated boneless, bones, and reasonably free of parasites.

4. FOOD ADDITIVES

Only the use of the following additives is permitted.

4.1 Moisture/Water Retention Agents

Maximum Level
in the final
product

Monophosphate, monosodium or monopotassium } Monosodium or Monopotassium Orthophosphate } Diphosphate, tetrasodium or tetrapotassium } combination	10g/kg expressed As P2O5, singly or in
(Na, K, or Ca tripolyphosphate) }	
Triphosphate, pentasodium or calcium }	includes natural phosphate)
(Na, K, or Ca tripolyphosphate) }	
Polyphosphate, sodium (Na hexametaphosphate) }	
Sodium alginate	5g/kg

4.2 Antioxidants

Ascorbic acid or its sodium or potassium }	1g/kg,
Salts }	expressed as
Ascorbic palmitate }	ascorbic acid,
	singly
	or in
	combination

In addition, for Minced Fish Flesh only:

Citric acid or its sodium or potassium }	1/kg,
salts }	expressed as
	citric acid,
	singly or in
	combination

4.3 Thickeners

Guar gum }	
Carob bean (locust bean) gum }	5g/kg singly or
Pectins }	in combination
Carboxymethyl cellulose, sodium salt }	
Xanthan gum }	
Carrageenan }	
Methyl Cellulose }	

5. HYGIENE AND HANDLING

5.1 The final product shall be free from any foreign material that poses a threat to human health.

5.2 When tested by appropriate methods of sampling and examination prescribed by the Codex Alimentarius Commission (CAC), the product:

(i) shall be free from microorganisms or substances originating from microorganisms in amounts which may represent a hazard to health in accordance with standards established by the CAC; and

(ii) shall not contain any other substances in amounts which may represent a hazard to health in accordance with standards established by the CAC.

5.3 It is recommended that the product covered by the provisions of this standard be prepared and handled in accordance with the following Codes:

(i) the appropriate sections of the Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1995, Rev. 2);

(ii) the Recommended International Code of Practice for Frozen Fish (CAC/RCP 16-1978);

(iii) the Recommended International Code Practice for Minced Fish Prepared By Mechanical Separation (CAC/RCP 27-1983).

6. LABELLING

In addition to the provisions of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985) the following specific provisions apply;

6.1 The Name of The Food

6.1.1 The name of the food shall be declared as "x y blocks" in accordance with the law, custom or practice of the country in which the product is distributed, where "x" shall represent the common name(s) of the species packed and "y" shall represent the form of presentation of the block (see Section 2.3).

6.1.2 The name "quick frozen", shall also appear on the label, except that the term "frozen" may be applied in countries where this term is customarily used for describing the product processed in accordance with subsection 2.2 of this standard.

6.1.3 The proportion of mince in excess of 10% of net fish content shall be declared stating the percentage ranges: 10-25, > 25-35, etc. Blocks with more than 90% mince are regarded as mince blocks.

6.1.4 The label shall state that the product should be maintained under conditions that will maintain the quality during transportation, storage and distribution.

6.2 Net Contents (Glazed Blocks)

Where the food has been glazed, the declaration of net contents of the food shall be exclusive of the glaze.

6.3 Storage Instructions

The label shall include terms to indicate that the product shall be stored at a temperature of -18 degrees Celsius or colder.

6.4 Labelling of Non-Retail Containers

Information specified above shall be given either on the container or in accompanying documents, except that the name of the product, lot identification, and the name and address of the manufacturer or packer, shall appear on the container.

However, lot identification, and the name and address of the manufacture or packer may be replace by an identification mark provided that such mark is clearly identifiable with the accompanying documents.

7. SAMPLING, EXAMINATION AND ANALYSES

7.1 Sampling Plan for Fish Blocks

(i) Sampling of lots examination of the product shall be in accordance with the modified sampling plan defined below (paragraph 69, ALINORM 89/18). The sample unit is the entire block.

Lot Size (Number of blocks)	Sample Size (Number of blocks to be tested) (n)	Acceptance Number (o)
<15	2	0
16 - 50	3	0
51 - 150	5	1
151 - 500	8	1
501 - 3200	13	2
3201 - 35000	20	3
< 35000	32	5

If the number of defective blocks in the sample is less than or equal to c , accept the lot; otherwise, reject the lot.

(ii) Sampling of lots for examination of net weight shall be carried out in accordance with an appropriate sampling plan meeting the established criteria established by the CAC.

7.2 Sensory and Physical Examination

Samples taken for sensory and physical examination shall be assessed by persons trained in such examination and in accordance with procedures elaborated in Section 7.3 through 7.7 and Annex A and in accordance with the Code of Practice for Sensory Examination (under development).

7.3 Determination of Net Weights

7.3.1 Determination of Net Weight of Product Not Covered by Glaze

The net weight (exclusive of packaging material) of each sample unit representing a lot shall be determined in the frozen state.

7.3.2 Determination of Net Weight of Products Covered by Glaze

As soon as the package is removed from frozen temperature storage, open immediately and place the contents under a gentle spray of cold water until all ice glaze that can be seen or felt is removed. Remove adhering water [by the use of paper towel] and weight the product.

An alternate method is outlined in Annex B.

7.4 Procedure for the Detection of Parasite (Type I method)

The entire sample unit is examined non-destructively by placing appropriate portions of the thawed sample unit on a 5 mm thick acryl sheet with 45% translucency and candled with a light source giving 1500 lux cm above the sheet. For skin-on fillets, the skin is not removed before examination.

Parasites may be detected using this candling procedure or by other visual non-destructive means.

7.5 Determination of Proportions of Fillets and Minced Fish in Quick Frozen Blocks prepared from Mixtures of Fillets and Minced Fish

According to the AOAC Method - "Physical Separation of Fillets and Minced Fish", AOAC 1988, 71, 206 (Type II).

7.6 Determination of Gelatinous Condition

[According to the AOAC Methods - "Moisture in Meat and Meat Products, Preparation of Sample Procedure"; AOAC 1990, 983.18 and "Moisture in Meat" Method A, 950.46; AOAC 1990]

7.7 Cooking Methods

The following procedures are based on heating the product to an internal temperature of >70 degrees Celsius. The product must not be overcooked. Cooking times vary according to the size of the product and the temperatures used. The exact times and conditions of cooking for the products should be determined by prior experimentation.

Baking Procedure: Wrap the product in aluminum foil and place it evenly on a flat cookie sheet or shallow flat pan.

This method has been evaluated for cod only but, in principle, should be appropriate to other fish species or mixed species.

This method is accurate for levels of mince greater than 10%.

Steaming Procedure: Wrap the product in aluminum foil and place it on a wire rack suspended over boiling water in a covered container.

Boil-In-Bag Procedure: Place the product into a boilable film-type pouch and seal. Immerse the pouch into boiling water and cook.

Microwave Procedure: Enclose the product in a container suitable for microwave cooking. If plastic bags are used, check to ensure that no odour is imparted from the plastic bags. Cook accordingly to equipment instructions.

8. CLASSIFICATION OF DEFECTIVE

The sample unit shall be considered defective when it fails to meet any of the following final product requirements referred to in 3.4.

8.1 Deep Dehydration

Greater than 10% of the surface area of the sample unit exhibits excessive loss of moisture clearly shown as white or yellow abnormality on the surface which masks the colour of the flesh and penetrates below the surface, and cannot be easily removed by scraping with a knife or other sharp instrument without unduly affecting the appearance of the block.

8.2 Foreign Matter

The presence in the sample unit of any matter which has not been derived from fish (excluding packing material), does not pose a threat to human health, and is readily recognized without magnification or is present at a level determined by any method including magnification that indicates non-compliance with good manufacturing and sanitation practices.

8.3 Parasites

The presence of two or more parasites per kg of the sample unit detected by a method described in 7.4. with a capsular diameter greater than 3 mm or a parasite not encapsulated and greater than 10 mm in length.

8.4 Bones (in packs designated boneless)

One bone per kg greater or equal to 10mm in length, or greater or equal to 1 mm in diameter; a bone less than or equal to 5 mm in length, is not considered a defect if its diameter is not more than 2 mm. The foot of a bone (where it has been attached to the vertebra) shall be disregarded if its width is less than or equal to 2 mm, or if it can easily be stripped off with a fingernail.

8.5 Odour and Flavour

A sample unit affected by persistent and distinct objectionable odours or flavours indicative of decomposition or rancidity or of feed.

8.6 Texture

A sample unit affected excessive gelatinous condition of the flesh together with greater than [86%] moisture found in any individual fillet, or a sample unit with pastry texture resulting from parasitic infestation affecting more than [5%] of the sample unit by weight.

9. LOT ACCEPTANCE

A lot shall be considered as meeting the requirements of this standard when:

(i) the total number of defective sample units as classified according to Section 8 does not exceed the acceptance number (c) of the sampling plan in Section 7;

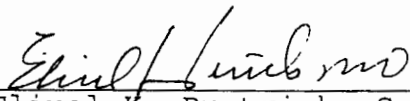
(ii) the average net weight of all sample units is not less than the declared weight, provided there is no unreasonable shortage in any container; and

(iii) the Food Additive, Hygiene and Labelling requirements of Sections 4, 5.1, 5.2 and 6 are met.

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DHS REGULATIONS NO. 6

Pursuant to the authority vested in me by Section 25 of the National Food Safety Act, P.L. 7-116, and having complied with the applicable provisions of Title 17 of the Code of the Federated States of Micronesia, these National Food Safety Act Regulations are hereby approved.

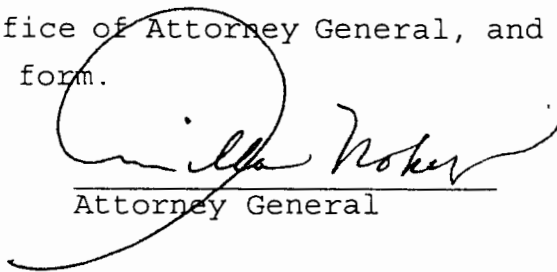
Date: February 3, 1997



Dr. Eliuel K. Pretrick, Secretary
Department of Health Services

The provisions of these National Food Safety Act Regulations have been reviewed by the Office of Attorney General, and have been found to be in proper legal form.

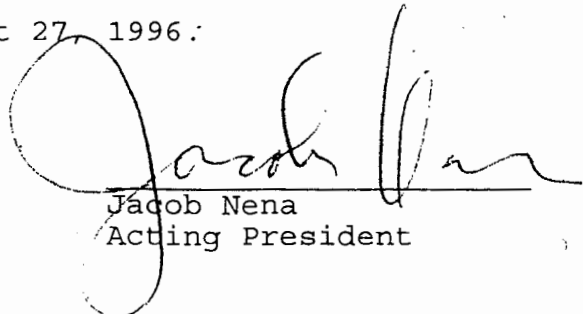
Date: 3 February 1997



Attorney General

These Regulations for Quick Frozen Blocks of Fish Fillet, Minced Fish Flesh, Mixtures of Fillets and Minced Fish Flesh which have been promulgated by the Secretary of the Department of Health Services in accordance with law, are hereby approved and shall become effective on August 27, 1996:

Date: 4/8/97



Jacob Nena
Acting President