NORMATIVE INSTRUCTION N ° 21, FROM MAY 31, 2017

THE MINISTER OF STATE OF AGRICULTURE, PECUARY AND SUPPLY, in the use of the attribution conferred by art. 87, sole paragraph, item II, of the Federal Constitution, in view of the provisions of Law No. 1,283 of December 18, 1950, Law No. 7,889, dated November 23, 1989, Decree No. 9,013 of March 29 Of 2017, and that of Process nº 21000.007168 / 2010-04, resolves:

Art. 1°. It is approved the Technical Regulation that establishes the IDENTITY AND THE QUALITY characteristics that the **FROZEN FISH** must present, in the form of this Normative Instruction and its Annex.

Article 2. For the purposes of this Regulation, frozen fish is all product obtained from fresh, chilled, thawed or frozen raw material of fish species from fishery or aquaculture subjected to rapid freezing in its final presentation.

Single paragraph. The fast freeze treated in the caput should observe the maximum crystallization temperature limits and should not be considered complete until the product temperature has reached -18°C (eighteen degrees Celsius negative) at the geometric center of the product.

Article 3. Frozen fish, according to their anatomical components, is classified according to the following presentation forms:

- I flaps or fins: fins of the rays or sharks including the basal plate, their cartilaginous rays and their musculature;
- II head: region formed by the skull and the opercular bones;
- III rib: portion obtained from the sagittal cut of the post from the posterior to the head to the end of the visceral cavity;
- IV flattened: eviscerated fish cut longitudinally to the vertebral column, keeping the two flanks together, preserving the spine;
- V flattened without head: eviscerated fish without head, cut longitudinally to the vertebral column, keeping the two flanks together, preserving the spine;
- VI spine: structure remaining from the extraction of fish fillets, comprising the vertebral column, spines and adhered musculature;
- VII gutted: fish from which the viscera were removed;
- VIII Gutted without head: fish from which the viscera and head were removed;
- IX fillet: product obtained from single longitudinal sectioning of the muscular portion from the immediately posterior part of the head to the caudal peduncle, parallel to the vertebral column;
- X fillet in pieces: product obtained from fillet cuts;
- XI flattened fillet: product consisting of fillets joined by the back;
- XII whole: whole fish containing viscera and head, with or without fins;
- XIII loin: dorsal portion of fillet, removed caudal peduncle;

- XIV loin in pieces: product obtained from cuts of the loin;
- XV medallion: product obtained from cutting the fillet or loin of the fish in a circular format;
- XVI piece: product obtained from various cuts of the fish;
- XVII posta: product obtained from cuts crosswise to the vertebral column of eviscerated fish without head and removed caudal fin;
- And XVIII belly: ventral portion to fillet, corresponding to the lower part of the celomática cavity.
- Art. 4°. Frozen fish may be glazed up to a maximum of 12% (twelve percent) of the declared net weight.
- §10 The glaciation referred to in the caput consists of the application of water, with or without additives, on the surface of the frozen fish, forming a protective layer of ice to avoid oxidation and dehydration.
- §20 The water incorporated in the glaciation process does not comprise the declared net weight of the product.
- Art. 5°. Frozen fish is a mandatory ingredient for fish, and no optional ingredients are allowed.
- Art. 6°. Frozen fish should meet the following sensory characteristics:
- I clean surface, with characteristic pigmentation of the species;
- II strong and characteristic musculature characteristic of the species, which does not easily detach from the spines and vertebral column and preserves the conformation of the myomers and myositis;
- III absence of ammoniacal odor, rancid or indicative of putrefaction;
- IV characteristic exudation of the species;
- V should not have disgusting appearance, abnormalities, gelatinous texture, pasty or spongy;
- And VI absence of signs of cold burning, excessive dehydration with abnormal yellowish or whitish coloration on the surface.
- Single paragraph. Cooking is allowed to aid in the evaluation of established sensory characteristics.
- Art. 7. Frozen fish must comply with the following physicochemical parameters:
- I the **pH** of the muscular portion should be a maximum of **7.00 (seven integers)**, excluding the species of the families **Gadidae and Merluccidae** whose value should be a maximum of **7.20** (seven and twenty tenths);
- II The lower Total Volatile Bases BVT should be no more than 30 mg (thirty milligrams) of nitrogen / 100g (one hundred grams) of muscle tissue except for:
- (A) species of the Salmonidae, Gadidae and Merluccidae families which shall be no more than 35 mg of nitrogen / 100g (one hundred grams) of muscle tissue;

B) and b) elasmobranchs that must be at most 40 mg (forty milligrams) of nitrogen / 100g (one hundred grams) of muscle tissue;

III - total phosphorus must be at most 5 g (five grams) of P2O5 (phosphorus pentoxide) / kg (kilogram) of muscle tissue;

IV - sodium should be no more than 134 mg (one hundred and thirty-four milligrams) of Na / 100 g (one hundred grams) of muscle tissue;

V - potassium should be no more than 502 mg (one hundred and two milligrams) K / 100g (one hundred grams) of muscle tissue;

VI - the ratio between the moisture and protein content in the muscle portion should be maximum 6.00 (six integers), except for:

A) Oreochromis sp. And the species of the families Salmonidae, Clupeidae and Scombridae that must be maximum 5,00 (five integers);

And (b) the species of the families Paralichthyidae, Ophidiidae, Serranidae and Pleuronectidae, which shall be no more than 6.50 (six and fifty tenths);

VII - the maximum histamine limit should be 100 mg / kg (one hundred milligrams per kilogram) of muscle tissue, based on a sample composed of 9 (nine) sample units, for the species of the families Carangidae, Gempylidae, Istiophoridae, Scombridae, Scombresocidae, Engraulidae, Clupeidae, Coryphaenidae and Pomatomidae, and no sample unit may present a result greater than 200 mg / kg (two hundred milligrams per kilogram).

Single paragraph. The relationship between the moisture and protein content dealt with in section VI does not apply to elasmobranchs.

Art. 8. Frozen fish must comply with the microbiological criteria established in the Single Annex of this Normative Instruction.

Art. 9 °. Frozen fish should be kept at a temperature not higher than -18 ° C (eighteen degrees Celsius negative).

Article 10. Frozen fish shall not contain impurities or foreign substances of any kind.

Art. 11. For fish specimens, in the form of whole and eviscerated presentation, over 20 kg (twenty kilograms), it is allowed to be marketed without packaging, without prejudice to compliance with the legislation on labeling.

Art. 12. The sales name of the product is Frozen Fish, added, regardless of the order, of the presentation form and common name of the species in uniform characters in body and color.

§10 In the case of packaging containing more than one species of fish, the term "mixture of species" and the form of presentation must be added to the sales description, irrespective of the order, in uniform characters in body and color, To the common name or scientific name of the species.

§20 For products whose forms of presentation are those described in items IX, X, XIII and XIV, of article 3 of this Normative Instruction, the words "with skin" or "without skin", as the case may be, must appear on the labeling.

§30 In the case of frozen fish using additives in glacial water, the words "contains (main function and full name of the additive or main function and INS number of the additive) in the glacier water" shall appear on the labeling.

§40 In the case of a product obtained from the species Ruvettus pretiosus and Lepidocybium flavobrunneum, the following expression shall be stated: "Excessive consumption of this species may cause a laxative effect".

Article 13. The establishments have a period of 180 (one hundred and eighty) days, from the date of publication of this Normative Instruction, to promote the necessary adjustments in the labeling of the products.

Single paragraph. Products manufactured by the end of the adjustment period referred to in the caput may be marketed until the end of their shelf life.

Art. 14. Establishments have a term of 90 (ninety) days to promote the adjustments necessary to meet the requirements established in this Normative Instruction, counted from the date of its publication.

Art. 15. This Normative Instruction shall come into force on the date of its publication.

**BLAIRO MAGGI** 

**ATTACHMENT** 

MICROBIOLOGICAL CRITERIA FOR FROZEN FISH

REQUIREMENT ACCEPTANCE CRITERIA	Ν	С	m	М
Salmonella spp.	5	0	Absence in 25g	
Staphylococcus coagulase positive	5	2	5 x 10 <sup>2</sup>	10³
E. coli	5	2	11	500