

STATE STANDARD OF THE UNION OF SOVIET SOCIALIST REPUBLICS

FROZEN FISH

Specifications

OKP 92 6130

January 01, 1988

The standard shall be applied to frozen fish of all families and species.

The standard shall not be applied to frozen fish manufactured according to All-Union State Standards 17661, 20057 as well as to Anchovy (Engraulididae), Goby (Gobiidae), Flounder (*Platichthys flesus luscus* P), Smelt (*Osmerus*), Dace (*Leuciscus*), Capelin (*Mallotus*), Herring (*Clupeidae*), West Pacific Sardine, Whitebait (*Osmerus eperlanus*), Cartilaginous Fish (*Chondrichthyes*), small sized fish of the second and the third groups.

The requirements to the products aimed at ensuring product safety for human health and life are stipulated in sub-items 1.23; 1.24; 2.2; 3.1; 3.2; 3.3.

(Amended Revision, Amendment # 3).

1. TECHNICAL REQUIREMENTS

1.1 Frozen fish shall be manufactured in accordance with the requirements stipulated in this Standard. The technological procedures and the established sanitary norms and rules shall be observed.

1.2 Raw materials used for frozen fish manufacturing shall comply:

raw fish – with a normative document;

chilled fish – with All-Union State Standard 814 or other normative documents;

semi-prepared chilled fish – with a normative document;

Fish containing helminthes and helminthes larva in abdominal cavity shall be subjected to compulsory dressing.

(Amended Revision, Amendment # 2)

1.3 Materials used for frozen fish manufacturing shall be at least of the first grade (if there are any grades) and shall comply:

artificial water ice – with a normative document;

cooking salt – with All-Union State Standard 13830;

drinking water – with All-Union State Standard 2874;

(Amended Revision, Amendment # 2)

1.4 Frozen fish is subdivided by length and weight in accordance with the requirements of All-Union State Standard 1368.

1.5 By types of dressing, the following kinds of frozen fish are manufactured:

uneviscerated fish

beheaded fish – fish head, humeri and viscera (digestive tract, swimming-bladder and liver) are extracted without cutting the belly; it is allowed to keep remains of viscera, caviar or milt, black belly nap, unopened swimming bladder and kidneys;

Far East Saffron Cod (*Eleginus gracilis*), Greeling (*Hexagrammos*) and Alaska Pollack (*Theragra chalcogramma*) are manufactured as beheaded fish. It is also allowed to manufacture beheaded Alaska Pollack from raw Alaska Pollack of length 20-30 cm. The caudal fin must be gutted with a straight cut located 1-2 cm above the base of middle rays.

The length of beheaded Saffron Cod (*Eleginus gracilis*) and Greeling (*Hexagrammos*) shall be at least 17 cm. The length of beheaded Alaska Pollack shall be at least 20 cm. The length of beheaded Alaska Pollack without caudal fin (gutted) shall be at least 12 cm.

eviscerated fish with head – fish is cut along the belly between pectoral fins from fish belly to anus; fish belly may be cut off; viscera, caviar, or milt must be extracted; blood clots and kidneys must be cleaned.

Cod (*Gadus*), Haddock (*Melanogrammus aeglefinus*) and Pollack (*Pollachius*) are manufactured as eviscerated fish with heads; the weight of the fish shall be at least 0,4 kg.

When Far East Salmon Fish (*Salmo*) is dressed by machine, it is allowed to non-symmetrically cut a fish belly and a low jar. The section line may deviate from the center of the fish belly: of I grade fish - for 1 cm, of II grade fish - for not more than 2 cm;

eviscerated and beheaded fish - fish is cut along the belly between pectoral fins from fish belly to anus, fish belly may be cut off; head, viscera, caviar or milt must be extracted; blood clots and kidneys must be cleaned.

Eviscerated and beheaded Alaska Pollack (*Theragra chalcogramma*) is manufactured without caudal fin and caudal part (gutted); the minimal length of eviscerated and beheaded Alaska Pollack (*Theragra chalcogramma*) shall be 22 cm.

Eviscerated and beheaded Far East Salmon Fish (*Salmo*) is manufactured by gutting head and humeri with a straight or bevel cut or by gutting head with a semicircular cut and keeping humeri.

When dressed by machine, it is allowed to partially extract a belly and pelvic fin as well as to cut belly farther anus for not more than 2 cm.

piece - eviscerated and beheaded fish without caudal fin (gutted) is cut to pieces. The weight of a piece shall be at least 0,5 kg;

back – fish abdominal part and head are gutted with the cut going from collar bone to the end of the first anal fin. Abdominal part is gutted along with backbone for at not more than 1/3 of the back length. The rest of it is extracted with the cut made lower the backbone. Anal fin must be gutted along with the adjacent meat. Back must be cleaned from blood clots and kidneys.

For certain specimen, the small incisions of collarbone cartilaginous tissue are allowed.

The Alaska Pollack (*Theragra chalcogramma*) is manufactured as backs. The length of Alaska Pollack back shall be at least 22 cm. It is allowed to gut a caudal fin.

(Amended Revision, Amendment # 2, 3)

1.6 Cod (*Gadus*), Haddock (*Melanogrammus aeglefinus*), Pollack (*Pollachius*) and Catfish (*Anarichas*) are manufactured as eviscerated and beheaded fish. The large Cod (*Gadus*) and Catfish (*Anarichas*) may be cut to pieces.

Norway Haddock (*Sebastes marinas*) is manufactured as eviscerated fish with head and eviscerated and beheaded fish.

The weight of eviscerated Norway Haddock (*Sebastes marinas*) with head shall be at least

farther anus for 1,5-2 cm. For Cod (*Gadus*), Haddock (*Melanogrammus aeglefinus*), Pollack (*Pollachius*), it is allowed to cut to the beginning of the second anal fin. Norway Haddock (*Sebastes marinas*) may be gutted with a bevel cut: along the straight line from collarbone to anus, not reaching the anus for 2-3 cm; thin abdominal walls must be extracted.

When dressed by machine, it is allowed to gut the head and humeri as well as thin abdominal walls with a bevel cut; it is allowed to cut the belly farther anus for not more than 2 cm.

It is allowed to manufacture Cod (*Gadus*), Haddock (*Melanogrammus aeglefinus*), Pollack (*Pollachius*) of 0,4 kg or less, Haddock (*Sebastes marinas*) of 0,3 kg or less as uneviscerated fish.

(Amended Revision, Amendment # 3)

1.7 Sturgeon (*Acipenseridae*), except for Sterlet (*Acipenser ruthenus*), is manufactured as eviscerated fish with head; when gutted, viscera, caviar, or milt and fat must be extracted; anal sphincter must be cut and extracted as well as bowels. It is allowed to keep a spinal cord.

Coated muscle fat located on internal surface of abdominal walls must not be extracted.

Sterlet (*Acipenser ruthenus*) is manufactured as uneviscerated fish

the fish was refrigerated in salt-ice method;
the fish was vacuum-packed in plastic bags approved for use by the USSR Ministry of Health.
the fish was refrigerated in packages made of

| Characteristics and Norms | |
|---|---|
| Grade | Second Grade |
| meat injuries: | |
| | Not more than 3 external injuries per fish (perforation, incision (max. 1 cm each) and for not more than 10 % of fish in transportation packaging unit; broken gill covers, for eviscerated Cod (Gadus), Haddock (Melanogrammus aeglefinus), Pollack (Pollachius) – meat tear up to 2,5 cm and denudation of humeri up to ¾ of their lengths and for not more than 10 % of fish in transportation packaging unit; |
| Where the following is possible: | |
| (Gadus rathenus), (Acipenser (Stizostedion), (Tinea tinea), Tench (Scardinius (Stizostedion) Perch (Stizostedion) reddening | Fished with bruises |
| (Acipenseridae), Conny – partial | For Sturgeon (Acipenseridae), Conny (Stenodus leucichthys), Crusian Carp (Carassius), Tench (Tinea tinea), Red Fin (Scardinius erythrophthalmus), Pike Perch (Stizostedion) – surface reddening |
| (Stenodus leucichthys) – reddening of gill covers (Stizostedion), Caspian Roach (Leuciscus rutilus caspicus), (Carassius auratus gibelio), Barbell (Barbus), Roach (Rutilus rutilus), (Leuciscus frisii kutum), Catfish (Silurus glanis), Mullet | |

| Indicator | Characteristics and Norms | |
|--------------------------|---|--|
| | First Grade | Second Grade |
| Smell (after unfreezing) | Smell inherent to fresh fish without spoilage signs | |
| | | It is allowed: sour smell in gills smell of aged fat surface not penetrating into meat for Conny (Stenodus leucichthys), Nelma (Stenodus leucichthys), Salmon (Salmo Solar), Caspian, Baltic, Lake and Far East Salmon (Salmo) and Whitefish (Coregonus) |

1.23 The content of toxic elements, histamine (for Scomber (Scombridae)) and pesticide in the product shall not exceed the allowed levels established by medical and biological requirements and sanitary norms of food raw materials and food quality approved by the USSR Ministry of Health (# 5061 dated August 01, 1989).

1.24 Fish shall not contain helminthes and helminthes larva which are dangerous for human health.

Fish intended for sale in retail network shall contain no helminthes visible for unaided eye.

The allowed quantity of non-dangerous for human health parasites and their larva shall not exceed the norm established by "Guidelines for sanitary and parasitologic evaluation of sea fish and fish products (raw fish, chilled and frozen sea fish, intended for sale in retail network and at public catering establishments)" approved by the USSR Ministry of Fishery and coordinated with the USSR Ministry of Health.

2. ACCEPTANCE PROCEDURE

2.1 Acceptance procedure is stipulated in All-Union State Standard 7631-85.

2.2 The content of toxic elements, histamine and pesticide shall be controlled in accordance with the procedure established by a producer and approved by the bodies of state sanitary and epidemiological supervision. The procedure shall guarantee the safety of products.

3. TESTING METHODS

3.1 The sampling methods are stipulated in All-Union State Standard 7631-85; the sampling for parasitologic evaluation shall be performed according the methods of parasitologic inspecting of sea fish and fish products (raw sea fish, chilled and frozen fish) approved by the USSR Ministry of Fishery.

The preparation of samples for the toxic elements identification shall be performed in accordance with the All-Union State Standard 26929-86.

3.2 Testing methods are stipulated in All-Union State Standards 7631-85, 7636-85, 26927-86, 26930-86, 26934-86.

3.3 The content of pesticides and histamine shall be determined according to the methods approved by the bodies of state sanitary and epidemiological supervision, the content of parasites and parasitogenic lesions - in accordance with the methods of parasitologic inspection of sea fish and fish products (raw sea fish, chilled and frozen fish), the rules of sanitary and helminthological expertise of fish and specification for decontamination of fish from the larva of diphyllbothriasis and opisthorchosis (Sanitary Rules and Norms # 15-6/44).

3.4 The teeth height shall be measured based on the largest teeth of fish selected for organoleptic quality evaluation.

The teeth height shall be measured in centimeters using trammels in accordance with ALL-Union Standard 166-80. The teeth height shall be the distance between the tooth root to the tooth point with the absolute error 0,1 cm.

If the mentioned above measuring device is not available, it is allowed to use other measuring devices envisaged by the standards or technical specifications. The device shall ensure the required accuracy of measurements.

3.5 The ratio of jar length to fish carcass length

Carp (*Cyprinus carpio*), Whitefish (*Coregonus*), Pike Perch (*Stizostedion*), River Perch (*Perca*), Pike (*Esox*), Catfish (*Silurus glanis*), Azov and Black Sea Flatfish (*Pleuronectiformes*), - not more than 6 months;

Eviscerated and uneviscerated Cod (*Gadus*), Flatfish (*Pleuronectiformes*) (except for Azov and Black Sea Flatfish (*Pleuronectiformes*)) – not more than 4 months;

Other freshwater fish – not more than 6 months;

Other sea fish – not more than 4 months;

The shelf life of the unglazed fish of dry artificial and natural freezing in retail packaging at the temperature not higher than -18 C shall be decreased for 1 month.

The shelf life of salt-ice frozen fish at the temperature not higher than -18 C shall be not longer than 1 month since manufacture day.

The shelf life of frozen fish (except for salt-ice frozen fish) at the temperature not higher than -10 C shall be reduced by 50 % since the moment of storing under such temperature.