

هيئة التقييس لدول مجلس التعاون لدول الخليج العربية
STANDARDIZATION ORGANIZATION FOR G.C.C (GSO)



GSO 1398 / 2002

الأسماك المخللة
MARINADED FISH

ICS: 67.120

MARINADED FISH

Date of GSO Board of Directors' Approval : **1423(H)-08-15 (2002-08-21)**
Issuing Status : **Technical Regulation**

MARINADED FISH**1. SCOPE AND FIELD OF APPLICATION**

This standard is concerned with pickled fish ready for human consumption.

2. COMPLEMENTARY REFERENCES

- 2.1 GSO 9/1995 “Labeling of Prepackaged Foods”.
 - 2.2 GSO Standard ON “Methods of Sampling for Fish, Shellfish and their Products”.
 - 2.3 GSO 589/1995 “Physical and Chemical Methods for testing Fish, Shellfish and their Products”.
 - 2.4 GSO 655/1996 “Methods for Microbiological Examination of Meat, Fish, Shellfish and their Products”.
 - 2.5 GSO 20/1984 “Methods for the Determination of Contaminating Metallic Elements in Foodstuffs”.
 - 2.6 GSO Standard ON “Salt for Foodstuffs”.
 - 2.7 GSO 21/1984 "Hygienic Regulations for Food Plants and their Personnel”.
 - 2.8 GSO 22/1984 “Methods of Testing Colouring Matter Used in Foodstuffs”.
 - 2.9 GSO Standard ON “Vinegar”.
 - 2.10 GSO Standard ON “Expiration Periods for Food Products”.
 - 2.11 GSO 88/1987 “Meat and Meat Products-Determination of Chloride Content (Reference Method)”.
 - 2.12 GSO 380/2000 “Chilled Fish”.
 - 2.13 GSO Standard ON “Frozen Fish”.
 - 2.14 GSO 839/1998 “Food Packages – Part I – General Requirements”.
 - 2.15 GSO Standard ON “Food Packages – Part II – Plastic Packages – General Requirements”.
 - 2.16 GSO 988/1999 “Limits of Radioactivity Levels Permitted in Foodstuffs”.
 - 2.17 GSO 998/1999 “Methods of Detection of Radioactivity Levels Permitted in Foodstuffs”.
 - 2.18 GSO 1016/1999 “Microbiological Limits for Foods – Part I”
- GSO STANDARD DRAFTS TO BE APPROVED BY THE ORGANIZATION CONCERNING:**
- 2.19 GSO Standard ON “Salted Fish”.

- 2.20 GSO Standard ON "Determination of Histamine in Foods".
- 2.21 GSO Standard ON "Limits of Pesticide Residues Permitted in Agricultural and Foodstuffs".
- 2.22 GSO Standard ON "Detection Methods for limits of Pesticides Residues Permitted in Agricultural and Foodstuffs".
- 2.23 GSO Standard ON "Detection Methods for Preservatives Permitted for addition in Foodstuffs".

3. DEFINITIONS

- 3.1 Marinading: Treatment of fish that have suitability for salting by mixture of salt and vinegar for purpose of maturation and preservation.
- 3.2 Cold marinated fish: Resulting marinading process (item 3.1) under refrigerator temperature (13-15°C) with suitable degree of maturation in order to acquire the organoleptic character.
- 3.3 Warm marinated fish: Resulting marinading process (item 3.1) and prepared form fish subjected previously for heat treatment.

4. REQUIREMENTS

The following requirements shall be met in marinated fish:

- 4.1 The product shall be prepared according to hygienic regulations stated in GSO standards mentioned in items (2.6, 2.7, 2.9) and according to GSO standards mentioned in items (2.12, 2.13 and 2.19).
- 4.2 The product shall contain the organoleptic character for each species and must be firm.
- 4.3 The product shall be from fish of same types and species and identical in size.
- 4.4 The product shall be free from rancid odour and any foreign odours.
- 4.5 The product shall be free from colours.
- 4.6 Salt using in salting processes shall be in accordance with GSO Standard mentioned in item (2.6).
- 4.7 Salt percentage in the final product shall not exceed 14 % and not less than 6 % by mass.
- 4.8 Spices are permissible to be added according to the good production.
- 4.9 Vinegar used in marinading process shall be in accordance with GSO Standard stated in item (2.9).
- 4.10 Fat content in the final product shall not be more than 15%.
- 4.11 Histamine content shall not exceed 30 mg/100 gm from the final product.

- 4.12 The contaminating metallic elements should not exceed the corresponding proportions (PPM):
- Mercury 0.5
 - Arsenic 0.5
 - Lead 1.0
 - Cadmium 0.5
 - Zinc 40.0
- 4.13 The microbiological criteria shall not exceed the limits stated in GSO Standard mentioned in item (2.18).
- 4.14 The limits of radioactivity level shall not exceed the maximum limits stated in GSO Standard mentioned in item (2.16).
- 4.15 Pesticide residues in the product shall not be more than the limits permitted by to GSO Standard stated in item (2.2 1).

5. SAMPLING

Samples shall be taken according to GSO Standard stated in item 2.2

6. METHODS OF INSPECTION AND TESTS

All required tests shall be carried out on the representative samples taken according to item (5) of this standard to determine its compliance with this standard.

- 6.1 Microbiological examination shall be determined according to GSO Standard mentioned in item (2.4).
- 6.2 Contaminating metallic elements shall be determined according to GSO Standard mentioned in item (2.5).
- 6.3 Detection of fat content shall be carried out according to GSO Standard stated in item (2.3).
- 6.4 Detection of colouring matter shall be carried out according to GSO Standard stated in item (2.8).
- 6.5 Sodium chloride content shall be determined according to GSO Standard mentioned in item (2.11).
- 6.6 Detection of radioactivity limits shall be determined according to GSO Standard mentioned in item (2.19).
- 6.7 Determination of histamine shall be carried out according to GSO Standard mentioned in item (2.20).

6.8 Detection of pesticide residues shall be determined according GSO Standard stated in item (2.22).

6.9 Detection of preservatives shall be carried out according GSO Standard stated in item (2.23).

7. PACKAGING, TRANSPORTATION AND STORAGE

7.1 Packaging

Without prejudice to the provisions of GSO Standard stated in item 2.14 and 2.15, the following shall be met during packaging:

7.1.1 Packages used in packing shall be clean, hygienic and made of suitable material which would not cause contamination during storage, transportation and handling.

7.1.2 Marinated fish shall be packed in suitable packages according to their type and species. The product units in each package shall be identical in shape, size and weight.

7.2 Transportation and Storage

The following shall be met during transportation and storage of marinated fish:

7.2.1 A suitable transportation unit that has not been used for transporting poisonous or hazardous material shall be used.

7.2.2 Transportation and storage shall be carried out under refrigerator temperatures (0 – 7°C) and by means that protect the product from mechanical damage and deterioration .

7.2.3 Expiry date shall be according GSO Standard stated in item (2.1 0).

8. LABELLING

Without prejudice to the provisions of GSO Standard stated in item 2. 1, the following information shall be declared on the label:

8.1 The word “marinated fish” with the type of fish used.

8.2 In case of large packages, the previous information shall be declared in a clear manner.