# هيئة التقييس لدول مجلس التعاون لدول الخليج العربية GCC STANDARDIZATION ORGANIZATION (GSO)



GSO 1360/2014 (E)

كافيار سمك الحفش Sturgeon Caviar

ICS: 67.120.30

## **Sturgeon Caviar**

Date of GSO Board of Directors' Approval: 15/07/1435h(14/05/2014)Issuing Status: Technical regulation

#### **Foreword**

GCC Standardization Organization (GSO) is a regional Organization which consists of the National Standards Bodies of GCC member States. One of GSO main functions is to issue Gulf Standards /Technical regulations through specialized technical committees (TCs).

GSO through the technical program of committee TC No (5) " GSO Technical Committee for Food and Agricultural Products " has updated the GSO Technical regulation No. : GSO 1360/2002 " NATURAL CAVIAR " The Draft Technical regulation has been prepared by Kingdom of Saudi Arabia .

This Technical regulation has been approved by GSO Board of Directors in its meeting No.(19), held on 15/07/1435h(14/05/2014), The approved standard will replace and supersede the standard No GSO. 1360/2002.

## **Sturgeon Caviar**

1	SCOPE
	This standard applies to granular sturgeon caviar of the fish of the Acipenseridae family.
2	COMPLEMENTARY REFERENCES.
2.1	GSO 9 "Labeling of Prepackaged Foods".
2.2	GSO 21 "Hygienic Regulations for Food Plants & Their Personnel".
2.3	GSO 150 "Expiration Periods Food Products – Part 1".
2.4	GSO 839 "Food packages- Part 1: General requirements".
2.5	GSO 988 "Limits of radioactivity levels permitted in food stuffs- Part 1".
2.6	GSO 998 "Methods for the detection of permissible radionuclides limits in food-Part 1: Gamma spectrometry analysis: A, Cs 134, Cs 137".
2.7	GSO 1863 " Food packages- Part 2: Plastic packages- General requirements".
2.8	GSO/CAC/MRL 2 Maximum Residue Limits for Veterinary Drugs in Food
2.9	GSO/CAC 193 " General Standard for contaminants and toxins in food and feed".
2.10	GSO 589 " Methods for physical and chemical Analysis of Fish, Shellfish and Their products".
2.11	GSO 655 "Methods for Microbiological Examination of Meat, Fish,".
2.12	GSO 1791 "Three piece steel round cans used for canning food stuffs"
2.13	GSO 1881 "Methods of Sampling for Fish, Shellfish and Their Products".
2.14	GSO 20 "Methods for the determination of contaminating metallic elements in food stuffs".
2.15	GSO 1026 "Code of Hygienic Practice for Preparation, Transportation".
2.16	GSO 323 "Requirements for Transportation and Storing Chilled and Frozen Foods".
2.17	GSO 1931" Halal Food Part (1): General Requirement".
2.18	GSO 1843 "Food Grade Salt".
2.19	GSO 1694"GENERAL PRINCIPLES OF FOOD HYGIENE".
2.20	GSO 22 "Methods of Testing Colouring Matter Used in Foodstuffs".
2.21	GSO 1804" Sensory analysis of foods – part2 – General requirements".
2.22	GSO 1805-3"Sensory analysis of foods – part3".
2.23	GSO 1016 "Microbiological Criteria for Foodstuffs – Part 1".
2.24	GSO Standards which Organization shall be approved concerned with:
2.24.1	"General Standard for food additives".

2.24.2

" Methods for the determination of fungi toxins in food and animal feeds".

- 2.24.3 "Methods for the determination of pesticide residues".
- 2.24.4 "Limits for residues of hormones and antibiotics.".
- 2.24.5 "Maximum limits for pesticide residues in food".

#### 3 DESCRIPTION.

#### 3.1 DEFINITIONS.

The following definitions are used in this standard:

- Fish eggs: non-ovulated eggs separated from the connective tissue of ovaries. Ovulated eggs may be used from aquacultured sturgeons.
- 3.1.2 Caviar: the product made from fish eggs of the *Acipenseridae* family by treating with food grade salt.

#### 3.2 PRODUCT DEFINITION.

Caviar: The product is prepared from fish eggs of sturgeon fishes belonging to the *Acipenseridae* family (*Acipenser*, *Huso*, *Pseudoscaphirhynchus* and *Scaphirhynchus* and hybrid species of these genera). The eggs are of about one size and evenly and characteristically coloured according to the species used. Colour can vary from light grey to black or from light yellow to yellowish grey. Brownish and greenish shades are permissible. The product is made with addition of food grade salt. The salt content of the product is equal or above 3g/100g and below or equal to 5g/100g in the end product.

#### 3.3 PROCESS DEFINITION.

- 3.3.1 The product, after suitable preliminary preparation of the caviar, shall be subject to treatment or conditions sufficient to prevent the growth of spore and non-spore forming pathogenic microorganisms and shall comply with the conditions laid down hereafter. Ovulated eggs are harvested after hormonal induction of ovulation of the female. The eggs are appropriately treated to remove adhesive layer and to harden the shell.
- 3.3.2 If hormones are used to produce ovulated eggs. they should be approved for use by the competent authority having jurisdiction.

#### 4 ESSENTIAL COMPOSITION AND QUALITY FACTORS

- **4.1** Without prejudice to what is stated in the GSO standard mentioned in 2 .17. ,The product shall be completely free from pig products or their derivatives
- 4.2 It shall be produced from raw materials complying with their relevant GSO standards

#### 4.3 RAW MATERIAL.

Caviar shall be prepared from fish eggs extracted from sound and wholesome sturgeons of biological species of the genera described in item 2.3 which are of a quality fit to be sold fresh for human consumption.

#### 4.4 SALT

Salt shall be of food grade quality and conform to all applicable Standards in Item 2.18.

#### 4.5 FINAL PRODUCT.

The product shall meet the requirements of the present Standard, when a lot examined in accordance with the requirements described in Item 2.8

#### 5 FOOD ADDITIVES.

Food additive used in products covered by this Standard, shall be added according to the Gulf standard mentioned in item 2. 24.1.

#### **6 CONTAMINANTS.**

- 6.1 The maximum limits for contaminants and toxins in products covered by this specification Should not exceed the limits of the gulf standard mentioned in item 2.9.
- 6.2 The limits for pesticides residues in products covered by this specification Should not exceed the limits of the standard mentioned in item 2.24.2.
- 6.3 the limits of allowable radiation levels in food products covered by this specification Should not exceed the limits contained in the gulf standard mentioned in item 2.5.
- 6.4 The maximum limits for residues of hormones and antibiotics in products covered by this specification Should not exceed on the limits of the product in the gulf standard mentioned in item 2, 24.4.
- 6.5 That the product is fit for human consumption and free of foreign substances, and rejected, and the implications of corruption, flavor and odors, and discoloration.
- 6.6 The hormone residues in the final product of caviar from the ovary, and the treatment of fish (for example with hormones) limits mentioned in item 2. 24.4.
- 6.7 The Maximum Residue Limits for Veterinary Drugs shall be according to item 2.8

#### 7 HYGIENE.

- 7.1 It is recommended that the product covered by the provisions of this standard be prepared and handled in accordance with the appropriate section(s) of the standards mentioned in items 2.2-2.15-2.19.
- 7.2 The limits of microbiological product Should not exceed the limits contained in the gulf standard mentioned in item 2.23
- 7.3 The product shall not contain any other substance in amounts which may present a hazard to health in accordance with Gulf standards.
- 7.4 The final product shall be free from any foreign material that poses a threat to human health.

#### 8 Packing, transport and storage.

- Products should be packed, transported and stored in accordance with the relevant standards set out in item.2.15.
- 8.2 Without prejudice of the Gulf standards and this standard articles mentioned in items 2.4-2.7-2.12-2.15 the product must be according to the following:
- 8.2.1 The packaged product should be in sealed containers and should protect the product during transport, storage and handling

8.2.2 The product shall be prepared by salting fish eggs with food grade salt. During packaging, storage and retail, the product temperature is between +2 and +4°C, whereas for wholesale business, including storage and transportation, the temperatures are between 0° and -4°C.

- 8.2.3 Freezing as well as frozen storage of caviar is not permitted unless the deterioration of quality is avoided.
- 8.2.4 Re-packaging of the product from larger to smaller containers under controlled conditions which maintain the quality and safety of the product shall be permitted.
- 8.2.5 No mixing of caviar from different sturgeon species or lots shall be permitted.

#### 9 SAMPLING, EXAMINATION AND ANALYSES.

#### 9.1 SAMPLING

Sampling of lots for examination of the product shall be in accordance to standard mentioned in item 2.13.

#### 9.2 EXAMINATION AND ANALYSES

The representative sample should be taken pursuant to item 2.13 All tests should be performed to determine their conformity with all provisions of this standard and according to standards listed in the following items:: 2.6- 2.10- 2.11- 2.14- 2.20- 2.21- and 2.22.

#### 10 DEFINITION OF DEFECTS.

The sample unit shall be considered as defective when it exhibits any of the following defects.

#### 10.1 FOREIGN MATTER.

The presence in the sample unit of any matter which has not been derived from sturgeon eggs, 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 practices and sanitation practices.

#### 10.2 ODOUR AND FLAVOUR.

The product affected by persistent and distinct objectionable odour and/or flavour indicative of decomposition, oxidation, or taste of feed (in fish reared in aquaculture), or contamination by foreign substances (such as fuel oil).

- The presence of hard cover of caviar grains that is not easily chewable or tenuous.
- The breaking up of the outer membranes when attempting to separate the grains.
- 10.5 The Presence of broken eggs or fluid.
- The presence of remnants of membranes and/or secreted fat in finished caviar.

#### 11 LOT ACCEPTANCE.

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

11.1 The total number of defectives as classified according to item 10 does not exceed the acceptable number of the appropriate sampling plan given in item 9.1.

The average net weight of all sample units is not less than the declared weight, provided no individual container is less than 95% of the declared weight.

11.3 Meet the requirements in this specification.

#### 12 LABELLING

Without prejudice to provisions of item 2.1 the following information shall be declared on the label of the products:

- 12.1 THE NAME OF THE FOOD.
- 12.1.1 For the Acipenseridae family, the name of the food shall be "caviar" or "caviar" completed with the usual name (Beluga for Huso huso, Ossetra for Acipenser guldenstaedtii and Acipenser persicus, Sevruga for Acipenser stellatus), in a manner not to mislead the consumer.
- For sturgeons having no common names, the name may be supplemented with the identification code or the scientific name of the species in accordance with Annex 1.
- 12.1.3 For hybrids the common name shall be supplemented with the word hybrid, and the parent sturgeon species may be shown according to Annex 1.
- 12.1.4 For caviar obtained from ovulated eggs, the product name shall be "caviar from ovulated eggs". The labelling shall be written in such a way as to avoid any risk of misleading consumers on the nature of the product.
- 12.2 STORAGE INSTRUCTION.

The labelling shall include terms to indicate that the product shall be stored under appropriate time/temperature conditions

12.3 REPACKAGING.

In case of repackaging of the product the facility registration code shall be identified.

12.4 LABELLING OF NON-RETAIL CONTAINERS.

Each primary container shall be labelled with the number markings of the lot and the species.

Information specified above shall be given either on the container or in accompanying documents, except that the name of the food, lot identification, and the name and address as well as storage instructions shall always appear on the container. However lot identification, and the name and address may be replaced by an identification mark, provided that such a mark is clearly identifiable with the accompanying documents.

#### ANNEX 1

**Table .1 - IDENTIFICATION CODES OF STURGEON SPECIES** 

Denomination of sturgeon fishes - Scientific names	Code
Huso huso	HUS
Huso dauricus	DAU
Acipenser naccari	NAC
Acipenser transmontanus	TRA
Acipenser schrenkii	SCH
Acipenser sturio	STU
Acipenser baerii baikalensis	BAI
Acipenser sinensis	SIN
Acipenser dabryanus	DAB
Acipenser persicus	PER
Acipenser brevirostrum	BVI
Acipenser fulvescens	FUL
Acipenser oxyrhynchus	OXY
Acipenser oxyrhynchus desotoi	DES
Acipenser gueldenstaedtii	GUE
Acipenser medirostris	MED
Acipenser baerii	BAE
Acipenser micadoi	MIK
Acipenser stellatus	STE
Acipenser ruthenus	RUT
Acipenser nudiventris	NUD
Pseudoscaphirhynchus fedtschenkoi	FED
Pseudoscaphirhynchus hermanni	HER
Pseudoscaphirhynchus kaufmanni	KAU
Scaphirhynchus platorhynchus	PLA
Scaphirhynchus albus suttkusi	ALB
Scaphirhynchus suttkus	SUS

### **REFERENCE:**

STANDARD FOR STURGEON CAVIAR (CODEX STAN 291 – 2010)