

EAST AFRICAN STANDARD

Frozen lobster tails — Specification



EAST AFRICAN COMMUNITY

Foreword

Development of the East African Standards has been necessitated by the need for harmonizing requirements governing quality of products and services in East Africa. It is envisaged that through harmonized standardization, trade barriers which are encountered when goods and services are exchanged within the Community will be removed.

In order to meet the above objectives, the EAC Partner States have enacted an East African Standardization, Quality Assurance, Metrology and Test Act, 2006 (EAC SQMT Act, 2006) to make provisions for ensuring standardization, quality assurance, metrology and testing of products produced or originating in a third country and traded in the Community in order to facilitate industrial development and trade as well as helping to protect the health and safety of society and the environment in the Community.

East African Standards are formulated in accordance with the procedures established by the East African Standards Committee. The East African Standards Committee is established under the provisions of Article 4 of the EAC SQMT Act, 2006. The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the private sectors and consumer organizations. Draft East African Standards are circulated to stakeholders through the National Standards Bodies in the Partner States. The comments received are discussed and incorporated before finalization of standards, in accordance with the procedures of the Community.

Article 15(1) of the EAC SQMT Act, 2006 provides that "Within six months of the declaration of an East African Standard, the Partner States shall adopt, without deviation from the approved text of the standard, the East African Standard as a national standard and withdraw any existing national standard with similar scope and purpose".

East African Standards are subject to review, to keep pace with technological advances. Users of the East African Standards are therefore expected to ensure that they always have the latest versions of the standards they are implementing.

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Introduction

Quick frozen lobster tails constitute one of the important marine products for export. There is considerable scope for developing exports further if the quality of the products is maintained continuously at a higher level.

In the preparation of this East African Standard, the following sources were consulted extensively:

IS 3892:1975(R2005), *Specification for Frozen Lobster Tails*

CAC/RCP 52:2003(Rev. 4:2008), *Code of practice for fish and fishery products*

IS 4303-1:1975, *Code of hygienic conditions for fish industry — Part 1: Pre-processing stage*

IS 4303-2:1975, *Code of hygienic conditions for fish industry — Part 2: Canning stage*

Codex Alimentarius website: http://www.codexalimentarius.net/mrls/vetdrugs/jsp/vetd_q-e.jsp

USDA Foreign Agricultural Service website: <http://www.mrldatabase.com>

USDA Agricultural Marketing Service website: <http://www.ams.usda.gov/AMSV1.0/Standards>

European Union: http://ec.europa.eu/enterprise/sectors/pharmaceuticals/veterinary-use/maximum-residue-limits/index_en.htm

Assistance derived from these sources is hereby acknowledged.

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Frozen lobster tails — Specification

1 Scope

This standard prescribes the requirements and the method of sampling and test for tails of all the species of the genera *Panulirus*, *Thunnus* and *Peurulus*.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

CAC/GL 21, *Principles for the establishment and application of microbiological criteria for foods*

CAC/RCP 1, *Recommended international code of practice — General principles of food hygiene*

CAC/GL 30, *Principles and guidelines for the conduct of microbiological risk assessment*

CAC/GL 31, *Guidelines for the sensory evaluation of fish and shellfish in laboratories*

CD/K/572:2010, *Fish and fisheries products — Methods of sampling*

CAC/RCP 52[CD/K/521:2010], *Code of practice for fish and fishery products*

EAS 35, *Edible salt — Specification*

EAS 12, *Drinking (potable water) — Specification*

EAS 38, *Labelling of prepackaged foods — Specification*

EAS 41, *Fruits, vegetables and derived products — Sampling and methods of test*

EAS 103, *Schedule for permitted food additives*

EAS 123, *Distilled water — Specification*

ISO 4831, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection and enumeration of coliforms — Most probable number technique*

ISO 4832, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of coliforms — Colony-count technique*

ISO 4833, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of microorganisms — Colony-count technique at 30 degrees C*

ISO 6579, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection of *Salmonella* spp.*

ISO 6887-1, *Microbiology of food and animal feeding stuffs — Preparation of test samples, initial suspension and decimal dilutions for microbiological examination — Part 1: General rules for the preparation of the initial suspension and decimal dilutions*

ISO 6887-3, *Microbiology of food and animal feeding stuffs — Preparation of test samples, initial suspension and decimal dilutions for microbiological examination — Part 3: Specific rules for the preparation of fish and fishery products*

ISO 6888-1, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of coagulase-positive staphylococci (Staphylococcus aureus and other species) — Part 1: Technique using Baird-Parker agar medium*

ISO 6888-2, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of coagulase-positive staphylococci (Staphylococcus aureus and other species) — Part 2: Technique using rabbit plasma fibrinogen agar medium*

ISO 6888-3, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of coagulase-positive staphylococci (Staphylococcus aureus and other species) — Part 3: Detection and MPN technique for low numbers*

ISO 7251, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection and enumeration of presumptive Escherichia coli — Most probable number technique*

ISO 7937, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of Clostridium perfringens — Colony-count technique*

ISO 13720, *Meat and meat products — Enumeration of Pseudomonas spp.*

ISO 17239, *Fruits, vegetables and derived products — Determination of arsenic content — Method using hydride generation atomic absorption spectrometry*

ISO 6634, *Fruits, vegetables and derived products — Determination of arsenic content — Silver diethyldithiocarbamate spectrophotometric method*

ISO 21567, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection of Shigella spp.*

ISO/TS 21872-1, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection of potentially enteropathogenic Vibrio spp. — Part 1: Detection of Vibrio parahaemolyticus and Vibrio cholerae*

ISO/TS 21872-2, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection of potentially enteropathogenic Vibrio spp. — Part 2: Detection of species other than Vibrio parahaemolyticus and Vibrio cholerae*

ISO 11290-1, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection and enumeration of Listeria monocytogenes — Part 1: Detection method*

ISO 11290-2, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection and enumeration of Listeria monocytogenes — Part 2: Enumeration method*

3 Description

3.1 Product description

3.1.1 The product is prepared from lobsters from the tails of all the species of the genera *Panulirus*, *Thunnus* and *Peurulus*.

3.1.2 The pack shall not contain a mixture of species.

3.2 Types

Fresh frozen lobster tails shall be of two types, depending upon the colour of the meat, namely:

- (a) snow-white to white, and
- (b) light pink to pink.

3.3 Grades

Unless otherwise agreed to between the purchaser and the vendor, the material shall be of the following seven grades:

Grade designation	Mass per individual piece
Super Jumbo	Above 340 g
Jumbo	285 to 340 g
Large	225 to 284 g
Medium	170 to 224 g
Small	115 to 169 g
Extra Small	50 to 114 g
Tiny	Below 50 g

3.4 Raw material

The raw material shall be fresh having its characteristic colour, appearance and odour. The meat shall not show any discolouration or deterioration and shall not give any off odour. The tails shall be free from eggs, saw dust, sand, dirt, and any other extraneous matter.

3.5 Processing

3.5.1 Preparation

Fresh lobsters shall be first washed thoroughly with potable water to remove all the adhering sand, dust, loose eggs, etc.

After beheading, the tails shall be cleaned so as to remove eggs, swimmerets and the alimentary tract. The material shall then be finally washed with potable water containing 5 ppm chlorine. It shall be stored and transported with sufficient ice to the processing factory within the minimum possible time.

3.5.2 Freezing

After proper washing with potable water containing 5 ppm chlorine, the lobster tails shall be either frozen in blocks or wrapped individually in polythene film or any other suitable moisture-proof covering already dipped in 5 ppm chlorine water for 5 minutes. In case of delay in keeping the material for freezing, the material shall be temporarily kept in chill room in 20 ppm chlorine water with suitable amount of ice. The material shall be quick frozen at or below -40°C within the minimum possible time.

3.5.3 Storing

The frozen material shall be transferred to a storage room maintained at or below -18°C .

3.5.4 Grading

Grading shall be done either before final washing and wrapping or after freezing, that is, before filling into the containers.

4 Essential composition and quality factors

When thawed, lobster tails shall have colour, appearance and odour characteristic of the species. They shall be free from eggs, saw dust, sand, dirt and any other extraneous matter. They shall also be free from defects, such as dehydration, discolouration, deterioration, black spots and off odour.

5 Food additives

Only the use of the following additives is permitted.

Additive	Maximum level in the final product
<u>Moisture/Water Retention Agents</u>	
451(i) Pentasodium triphosphate	10 g/kg expressed as P ₂ O ₅ , singly or in combination (includes natural phosphate)
451(ii) Pentapotassium triphosphate	
452(i) Sodium polyphosphate	
452(iv) Calcium polyphosphates	
<u>Preservatives</u>	
221 Sodium sulphite	100 mg/kg in the edible part of the raw product, or 30 mg/kg in the edible part of the cooked product, singly or in combination, expressed as SO ₂
223 Sodium metabisulphite	
224 Potassium metabisulphite	
225 Potassium sulphite	
228 Potassium bisulphite (for use in the raw product only)	
<u>Antioxidants</u>	
300 Ascorbic acid	GMP
301 Sodium ascorbate	
303 Potassium ascorbate	

6 Hygienic requirements

6.1 The material shall be prepared, filled and processed under hygienic conditions; only in premises maintained in a thoroughly clean and hygienic manner complying with CAC/RCP 1, CAC/RCP 52 and duly approved or licensed by the authorities concerned.

6.2 Microbiological and heavy metal contaminant limits

The material shall meet the microbiological and heavy metal requirements as given in Table 1 and Table 2.

Table 1 — Microbiological limits

S/No.	Type of microorganism	Maximum limit	Method of test
(i)	<i>Pseudomonas</i> species per gram	Absent	ISO 13720
(ii)	<i>Salmonella</i> in 30 g	Absent	ISO 6579
(iii)	<i>E. coli</i> per g	20	ISO 7251
(iv)	<i>Shigella</i> per g	Absent	ISO 21567
(v)	<i>Coliforms</i> g (per 100 g)	Absent	ISO 4832
(vi)	<i>Staphylococcus aureus</i> per 10 g	100	ISO 6888
(vii)	Total viable count	10 ⁵ /g	ISO 4833
(viii)	<i>Vibrio cholerae</i>	Absent	ISO/TS 21872
(ix)	<i>Clostridium perfringens</i>	Absent	ISO 7937

Table 2 — Contaminant limits for quick frozen lobsters

Type of contaminant		Maximum limit (mg/kg)	Method of test
(i)	Arsenic	0.1	EAS 41
(ii)	Copper	0.4	EAS 41
(iii)	Iron	5.0	EAS 41
(iv)	Tin		
	(a) For product packed in tin plate	50.00	EAS 41
	(b) For product packed in other packing containers	250.00	EAS 41
(v)	Mercury	0.5	EAS 41
(vi)	Lead	0.3	EAS 41
(vii)	Cadmium	0.3	EAS 41
(viii)	Methylmercury	0.5	EAS 41
(ix)	Zinc	50.0	EAS 41

7 Packaging and labelling

7.1 Packaging

7.1.1 The packaging of all types of lobsters and lobster products shall be done in packages that provide protection against mechanical damages, leakage and dehydration.

7.1.2 The materials used in packaging shall be new and shall not impart any injurious substances to the product.

7.1.3 Raw and cooked frozen lobsters and lobster products, when packed shall be individually wrapped in an immediate wrapper of polythene or other suitable material having similar moisture-proof characteristic such that all exposed meat is covered.

7.1.4 Material, which impart flavour or in any way causes discoloration of the product, or is itself discoloured by the contact with the product shall not be used as the immediate wrapper.

7.1.5 Raw and cooked frozen lobsters and lobster products shall be packed in a single service inner container (inner carton) manufactured from

- (i) Cardboard with a waterproof liner;
- (ii) Waxed cardboard with water-vapour-proof inner liner;
- (iii) Welded polythene or other suitable plastic material.

7.1.6 All inner containers (inner cartons) shall be packed in an outer container (master carton). Outer containers shall be wire-bounded or strapped with any other suitable material.

7.2 Labelling

In addition to the provisions of EAS 38, the following specific provisions apply:

7.2.1 The name of the food

The product shall be designated:

- (i) Lobster if derived from the genus *Homarus*;
- (ii) Rock Lobster, Spiny Lobster or Crawfish if derived from species of the family *Palinuridae*;
- (iii) Slipper Lobster, Bay Lobster or Sand Lobster if derived from species of the family *Scyllaridae*;

- (iv) Norway Lobster if derived from the species *Nephrops norvegicus*;
- (v) Squat Lobster if derived from the species *Cervimunida johnii*, *Pleuroncodes monodon* and *Pleuroncodes planipes*.

7.2.1.1 There shall appear on the label, reference to the form of presentation in close proximity to the name of the product in such descriptive terms that will adequately and fully describe the nature of the presentation of the product to avoid misleading or confusing the consumer.

7.2.1.2 In addition to the specified labelling designations above, the usual or common trade names of the variety may be added so long as it is not misleading to the consumer in the country in which the product will be distributed.

7.2.1.3 Products shall be designated as cooked or raw as appropriate.

7.2.1.4 If the product has been glazed with sea-water, a statement to this effect shall be made.

7.2.1.5 The term "quick frozen", shall also appear on the label, except that the term "frozen" may be applied in countries where this term is customarily used.

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

7.2.2 Net contents (glazed products)

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

7.2.3 Storage instructions

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

7.2.4 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 food, lot identification, and the name and address of the manufacturer or packer 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.

8 Sampling, examination and analyses

8.1 Sampling

8.1.1 The sampling and tolerance plans in CD-K-572:2010 shall be used to determine the acceptability of the lot. The sampling plans dictate the minimum sample size to be taken. If necessary, in the opinion of the inspector, more than the minimum sample size specified may be taken.

8.1.2 Sampling of lots for the sensory examination of the product shall be in accordance with CD-K-572:2010 except that a lower acceptance number for decomposition shall be used as indicated in the sampling tables.

The tables specify the minimum number of sample units to be used for the following types of inspections:

- a) Level I — Sensory examinations of all products subject to inspection other than lots which are subject to reinspection.

b) Level II — Sensory examinations of all products which are under reinspection.

8.1.3 The sample unit shall consist of a package of tails of lobster and the contents thereof. For package sizes of 2.27 kg (5 lb.) or greater, it is permissible to examine a sub-unit consisting of at least 1 kg of product, if, in the Inspector's opinion, a representative sub-unit can be obtained.

8.2 Sensory and physical examination

Samples taken for sensory and physical examination shall be assessed by persons trained in such examination and using procedures elaborated in 8.3 through 8.6, Annex A and CAC/GL 31.

8.3 Determination of net weight

8.3.1 Determination of net weight of products 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.

8.3.2 Determination of net weight of products covered by glaze

(Alternate Methods)

- (1) 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 weigh the product.
- (2) The pre-weighed glazed sample is immersed into a water bath by hand, until all glaze is removed, which preferably can be felt by the fingers. As soon as the surface becomes rough, the still frozen sample is removed from the water bath and dried by use of a paper towel before estimating the net product content by second weighing. By this procedure thaw drip losses and/or re-freezing of adhering moisture can be avoided.
- (3)
 - (i) As soon as the package is removed from frozen temperature storage, place the product in a container containing an amount of fresh potable water of 27°C (80°F) equal to 8 times the declared weight of the product. Leave the product in the water until all ice is melted. If the product is block frozen, turn block over several time during thawing. The point at which thawing is complete can be determined by gently probing the block.
 - (ii) Weigh a dry clean sieve with woven wire cloth with nominal size of the square aperture 2.8 mm (ISO 565) or alternatively 2.38 mm (U.S. No. 8 Standard Screen.)
 - (a) If the quantity of the total contents of the package is 500 g (1.1 lbs) or less, use a sieve with a diameter of 20 cm (8 inches).
 - (b) If the quantity of the total contents of the package is more than 500 g (1.1 lbs) use a sieve with a diameter of 30 cm (12 inches).
 - (iii) After all glaze that can be seen or felt has been removed and the lobsters separate easily, empty the contents of the container on the previously weighed sieve. Incline the sieve at an angle of about 20° and drain for two minutes.
 - (iv) Weigh the sieve containing the drained product. Subtract the mass of the sieve; the resultant figure shall be considered to be part of the net content of the package.

8.4 Determination of count

When declared on the label, the count shall be determined by counting all lobsters or tails in the primary container and dividing the count of lobster by the average deglazed weight to determine the count per unit weight.

8.5 Procedure for thawing

The sample unit is thawed by enclosing it in a film type bag and immersing in water at room temperature (not greater than 35°C). The complete thawing of the product is determined by gently squeezing the bag occasionally so as not to damage the texture of the lobster, until no hard core or ice crystals are left.

8.6 Cooking methods

The following procedures are based on heating the product to an internal temperature of 65-70°C. The product must not be overcooked. Cooking times vary according to the size of the product and the temperature used. The exact times and conditions of cooking for the product 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.

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 according to equipment specifications.

9 Definition of defectives

The sample unit shall be considered as defective when it exhibits any of the properties defined below.

9.1 Deep dehydration

Greater than 10% of the weight of the lobster in the sample unit or greater than 10% of the surface area of the block 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 lobster.

9.2 Foreign matter

The presence in the sample unit of any matter which has not been derived from lobster, 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.

9.3 Odour/Flavour

Lobster affected by persistent and distinct objectionable odours or flavours indicative of decomposition or rancidity, or feed.

9.4 Discolouration

Distinct blackening of more than 10% of the surface area of the shell of individual whole or half lobster, or in the case of tail meat and meat presentations distinct black, brown, green or yellow discolourations singly or in combination, of the meat affecting more than 10% of the declared weight.

10 Lot acceptance

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

- (i) not any single instance of critical foreign matter occurs; or

- (ii) the total number of sample units found defective for taint, decomposition or unwholesomeness, individually or in combination, does not exceed the acceptance number for the sample size designated in the sampling plans in CD-K-572:2010; or
- (iii) the total number of sample units found defective for decomposition does not exceed the acceptance number (c) shown in parentheses for the sample size designated in the sampling plans in CD-K-572:2010; or
- (iv) the total number of sample units found defective for standards of identity (style of presentation) and size designation or count range (if a size designation or count range is declared), exceeds the acceptance number for the sample size designated in the sampling plans.
- (v) the Food Additives, Hygiene and Labelling requirements of Sections 5, 6, and 7 are met.



Lobster tails



Frozen lobster tails

Annex A
(normative)

Sensory and physical examination

1. Complete net weight determination, according to defined procedures in Section 8.3 (de-glaze as required).
2. Examine the frozen lobster for the presence of deep dehydration. Determine the percentage of lobster affected.
3. Thaw using the procedure described in Section 8.5 and individually examine each sample unit for the presence of foreign and objectionable matter.
4. Examine product count and weight declarations in accordance with procedures in Section 8.4.
5. Assess the lobster for odour and discolouration as required.
6. In cases where a final decision regarding the odour/flavour cannot be made in the thawed state, a small portion of the sample unit (100 to 200 g) is prepared without delay for cooking and the odour/flavour confirmed by using one of the cooking methods defined in 8.6.

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Annex B
(normative)

Applicability of defects

Defects	Raw white lobster	Cooked white lobster	Raw lobster, tail half/split lobster	Lobster tail meat and lobster meat
Dehydration	—	—	X	X
Abnormal colouration	X	X	X	X
Black spot	X	X	X	X
Opacity	X	—	X	X
Damage (a)	X	X	X	—
(b)	—	—	X	—
Incomplete removal of intestines	—	—	X	—
Soft shell	X	X	X	X
Shell segments	—	—	—	X

KEY

X Means applicable
— Means not applicable

Annex C
(normative)

Evaluation of physical requirements

All lobster products shall be physically examined either non-destructively (without thawing) or destructively (after thawing) for defects listed in Table 2.

Points shall be added for each defect and the sum total shall be added per sample unit. A sample unit shall be considered defective if it exceeds the permissible number of points as given in C.1.2, C.2.1.1, C.2.2.1 and C.3.1.1.

C.1 Examination of whole lobster

C.1.1 Whole lobsters shall be subjected to destructive physical examination for defects listed in Table 3.

C.1.2 A sample unit shall be considered defective if it has

- (i) more than 4 points for defects classified as serious defect;
- (ii) more than a total of 6 points in combination for defects classified as serious and major defects;
- (iii) more than a total of 8 points in combination for defects classified as serious, major and minor defects.

C.2 Examination of half/split lobsters and lobster tails

C.2.1 Half lobsters and lobster tails shall be initially subjected to non-destructive physical examination for defects listed in Table 3.

C.2.1.1 A sample unit shall be considered defective if it has

- (a) more than 4 points for defects classified as serious defects; or
- (b) more than a total of 6 points in combination for defects classified as serious and major defects; or
- (c) more than a total of 8 points in combination for defects classified as serious, major and minor defects.

C.2.2 A sample unit, which obtains more than 2 points for defects, classified as major and minor defects singly or in combination according to Table 2 but is not a defective as defined in C.2.2.1 shall be destructively examined for physical defects listed in Table 2.

C.2.2.1 The sample unit shall be considered defective if it has

- (a) more than 4 points for defects classified as serious defects;
- (b) more than a total of 6 points in combination for defects classified as serious and major defects;
- (c) more than a total of 8 points in combination for defects classified as serious, major and minor defects.

C.3 Examination of lobster tail meat and lobster meat

C.3.1 Lobster tail meat and lobster meat shall be subjected to destructive physical examination for defects listed in Table 3.

C.3.1.1 A sample unit shall be considered a defective if it has

- (a) more than 4 points for defects classified as serious,
- (b) more than a total of 6 points in combination for defects classified as serious and major defects;
- (c) more than a total of 8 points in combination for defects classified as serious, major and minor defects.

Table 3 — Physical examination for all forms of presentations both destructive (examination in the thawed state) and non-destructive (examination without thawing)

Defects	Minor	Major	Serious
Dehydration			
(a) 10 % to 20 % of exposed surface area	—	2	—
(b) More than 20 % of exposed surface area	—	—	4
Abnormal colour (area affected)			
(a) Whole lobster up to 900 g or lobster over 300 g or lobster over 450 g			
(b) Split lobster up to 450 g or tail units up to 300 g			
(i) 100 mm sq to 225 mm sq	—	2	—
(ii) More than 225 mm sq	—	—	6
Black spot			
(applicable to split lobster and lobster tail meat)	—	—	4
Damages			
(a) Less than 5 tail segments	1		—
(b) Cut/scars	1	-2	—
(c) Cracked or crushed shell	—		—
Incomplete removal of intestine			
(applicable only to lobster tail)	—	—	4
Soft shell (applicable to split lobster and lobster tail)	—	2	—
Opacity (applicable to raw products)	—	2	—
Texture (cooked state)			
(a) Tough or fibrous	—	2	
(b) Mushy or gelatinous	—	—	-6
Objectionable odour - raw state	—	—	4
Objectionable odour/flavour - cooked state	—	—	6

Annex D
(normative)

Thawing and cooking

D.1 Thawing

A sample is thawed by enclosing it in a film-type bag immersed in an agitated water bath held at ambient temperature. If lobster products are individually frozen, complete thawing of the product is determined by gently squeezing the bag occasionally so as not to damage the texture of the lobster products, and until no hard core or ice crystals are felt. If the product is block frozen, turn the block over several times during thawing. The point at which thawing is complete can be determined by gently probing the block apart and until no hard core or ice crystals are felt.

D.2 Cooking

The raw frozen lobsters and lobster products shall first be thawed as described in D.1.

Cut from the lobster or lobster products, pieces of lobster meat 10 mm to 20 mm thick and place about 75 g of this, after rinsing in water, in a low density polythene bag of thickness 50 mm to 80 mm. Into the bag, add 100 ml of 1 per cent common salt solution and tie the bag so that water will not get into the bag when cooking. The bag shall be such a size that the lobster meat is completely covered by the salt solution.

The bag is then suspended in boiling water and the part of the bag containing lobster meat shall be kept well beneath the level of water to a boil cook for 9 minutes (more than one sample may be cooked at a time, provided the water returns to boil within 2 minutes).

Remove the bag, drain and cool approximately to room temperature (do not refrigerate). Evaluate odour, flavour and texture.

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