

# CODEX ALIMENTARIUS COMMISSION



Food and Agriculture  
Organization of the  
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Viale delle Terme di Caracalla, 00153 Rome, Italy - Tel: (+39) 06 57051 - E-mail: [codex@fao.org](mailto:codex@fao.org) - [www.codexalimentarius.org](http://www.codexalimentarius.org)

**Agenda Item 8**

**ASIA20/CRD1**

**JOINT FAO/WHO FOOD STANDARDS PROGRAMME  
FAO/WHO COORDINATING COMMITTEE FOR ASIA  
Twentieth Session**

**New Delhi, India, 26-30 September 2016**

**REPORT OF THE PHYSICAL WORKING GROUP ON THE PROPOSED  
DRAFT REGIONAL STANDARD FOR LAYER PRODUCTS**

## **Background**

1. The 19<sup>th</sup> Session of the FAO/WHO Coordinating Committee for Asia (CCASIA) agreed to establish the electronic Working Group (eWG) and the physical Working Group (pWG) on the proposed draft regional standard for Laver Products led by the Republic of Korea and co-chaired by Japan
2. The pWG was held on Sunday 25<sup>th</sup> 2016 Sep in Regal Room in venue prior to the plenary session. The participating countries were 12 countries; Cambodia, China, India, Indonesia, Japan, Lao PDR, Malaysia, Maldives, Republic of Korea, Singapore, Thailand and Philippines. Republic of Korea chaired the working group assisted by Codex Secretariat for modification of the draft

## **Discussion**

3. The pWG considered the proposed - draft standard section by section and made the following comments and changes.

### Section 2.3 Products Types

4. The pWG agreed to move the last paragraph in section 2.3.1.1 related to edible foreign matters and their related footnote to section 8 Labelling.
5. The pWG agreed to delete the last sentence in section 2.3.2 Roasted Laver Products because size and shape are specified in the definition of roasted laver products
6. The pWG agreed to change the title of section 2.3.3.2 'Brewing Seasoned Laver' into 'Seasoned Laver for Brewing' and to modify the second sentence for a more appropriate description for the product
7. The pWG agreed to delete section 2.3.3.3 Other Seasoned Laver since the products in section 2.3.3.1 and 2.3.3.2 can cover the distributed products in market

### Section 3 Essential Composition and Quality Factors

8. The pWG agreed to set the weight of basic ingredient as is more than 60% and to add the phrase "whether or not they are included intentionally" in the middle of the first sentence for accuracy. Also it was agreed to add a new sentence "when other edible seaweeds are mixed, the fact should be reflected to the name of the products defined in section 8.1" at the end of the first paragraph in order to prevent misleading consumers. The list of optional ingredients (a) to (f) are deleted under agreement.
9. For moisture content which is a very important quality factor for laver products, the pWG agreed to set 14% for 1<sup>st</sup> dried laver products and 7% for 2<sup>nd</sup> dried laver products as these figures appropriately reflect the products sold in market.
10. The pWG agreed to delete section 3.2.3 Peroxide value since the index is not stable and is difficult to set the maximum level.
11. Section 3.3 Classification of Defectives and 3.4 Lot Acceptance were modified since the unnecessary phrases and sentence are added by an editorial error.

Section 4 Food Additives

12. For seasoned laver products section 4.2, the pWG agreed that the food categories of the GSFA to which laver products are only 04.2.2.2 and 04.2.2.8 since food categories 04.2.2.3 through 04.2.2.7 do not include laver products covered by the Standard. In addition to the food additive provisions of the GSFA, the pWG agreed to add acesulfame potassium (INS 950) at 300 mg/kg.

13. The pWG added the general text related to the use of flavourings for seasoned laver products.

Section 6 Hygiene

14. The pWG agreed to remove the last paragraph of this section since this sentences are already covered in CAC/RCP 1-1969.

Section 7 Weight Measures & 8 Labelling

15. Due to time constraint, these two sections are left in square brackets for further discussion and agreed to request to hold an in-session WG.

Section 9 Method of Analysis and Sampling

16. The Codex Secretariat recalled that CAC39 had adopted an amendment to section on methods of analysis and sampling of the Format for Codex Commodity Standard (Section ii: Elaboration of Codex Commodity Standard). The amendment required that the section would include a standardized text and that the list of method of analysis and sampling would be removed when the standard is adopted by CAC.

17. The pWG added a standardized text.

**Recommendation**

18. The pWG recommends the plenary to consider the revised draft standard as attached in Appendix I.

**REPORT OF THE PHYSICAL WORKING GROUP ON THE PROPOSED  
DRAFT REGIONAL STANDARD FOR LAVER PRODUCTS  
(N14-2011)**

## 1. SCOPE

This standard applies to dried laver, roasted laver and seasoned laver products of the genus *Pyropia*, which are defined in Section 2 below, and offered for direct consumption, including for catering purposes or for repackaging and further processing if required.

## 2. DESCRIPTION

### 2.1 Product Definition

Laver products are those prepared mainly with raw laver, which belongs to the genus *Pyropia*. All products are dried and after drying, the products may be further roasted and/or seasoned.

### 2.2 Styles

The product may come in various styles such as a shredded fragment, a sheet, a rolled-sheet, a round lump, etc. Any presentation of the product shall be permitted provided that it meets all requirements of this standard; and is adequately described on the label to avoid confusing or misleading the consumer.

### 2.3 Product Types

#### 2.3.1 Dried Laver Products

##### 2.3.1.1 Dried Laver

Dried laver is the product of raw laver, which is washed, chopped/cut, molded, dehydrated and dried (~~4<sup>st</sup> dried products~~) after harvesting (1<sup>st</sup> dried products). It may go through a re-drying process (~~2<sup>nd</sup> dried products~~) for long-term storage (2<sup>nd</sup> dried products).

##### 2.3.1.2 Other Dried Laver

Other dried laver is the product other than the product defined in section 2.3.1.1.

#### 2.3.2 Roasted Laver Product

Roasted laver product is the product in which the dried laver products, defined in Section 2.3.1, go through roasting or any other heating methods without seasoning, so that its physicochemical characteristics such as colour, moisture and texture may change.

~~It may be cut into different shapes after roasting.~~

#### 2.3.3 Seasoned Laver Products

##### 2.3.3.1 Seasoned Laver

Seasoned laver is the product in which the dried laver products, defined in Section 2.3.1, is seasoned with any optional ingredients, defined in Section 3.1.2. It may have any following methods; roasting, stir/deep-frying, treating with edible oil, etc. before or after seasoning.

##### 2.3.3.2 Brewing Seasoned Laver for Brewing

~~Brewing s~~Seasoned laver for brewing is the product in which the dried laver, defined in Section 2.3.1.1, is broken and roasted/stir-fried. The product is already seasoned or ~~has add~~editional with seasoning ~~packs,~~ and then boiling water is added before when consumed~~ption~~. Boiling water is added before consumption.

##### ~~2.3.3.3 Other Seasoned Laver~~

~~2. Other seasoned laver is the product other than the products defined in Sections 2.3.3.1 and 2.3.3.2.~~

## 3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

### 3.1 Composition

#### 3.1.1 Basic Ingredients

Raw laver which belongs to the genus *Pyropia*, as defined in Section 2.1.

### 3.1.2 Optional Ingredients

As long as the weight of basic ingredient, which is defined in 3.1.1, is more than ~~{60%}~~, other edible seaweeds, whether or not they are included intentionally, may be used for the products defined in Section 2.3.1. When other edible seaweeds are mixed, the fact should be reflected to the name of the products defined in section 8.1.

All other ingredients may be used for the products defined in Section 2.3.3. Seasoned laver products, which shall be of food grade quality and conform to all applicable Codex standards if existsuch-as;

~~2.1 edible oil~~

~~2.1 sauces~~

~~2.1 sugars~~

~~2.1 salts~~

~~2.1 spice, seasoning and condiments~~

~~2.1 other ingredients as appropriate~~

### 2.2 Quality Factors

The final product shall maintain its own flavour and colour, which represent its raw materials and processing methods and it shall be free from off-flavours.

~~{3.2.1 Moisture content}~~ \_\_\_\_\_ ~~Maximum (%)~~

~~Dried Laver Products (1<sup>st</sup> dried product) \_\_\_\_\_ [13] or [14]~~

~~Dried Laver Products (2<sup>nd</sup> dried product) \_\_\_\_\_ [6] or [7]~~

~~Roasted Laver Product \_\_\_\_\_ 5~~

~~Seasoned Laver Products \_\_\_\_\_ 5~~

~~Brewing Seasoned Laver for brewing \_\_\_\_\_ 10~~

<u>Products</u>	<u>Moisture content (Maximum %)</u>
<u>Dried Laver Products (Section 2.3.1)</u>	<u>14</u>
<u>in case of (2<sup>nd</sup> dried products)</u>	<u>7</u>
<u>Roasted Laver Product (Section 2.3.2)</u>	<u>5</u>
<u>Seasoned Laver Products (Section 2.3.3)</u>	<u>5</u>
<u>In case of Seasoned Laver for Brewing (Section 2.3.3.2)</u>	<u>10</u>

### 3.2.2 Acid value

Maximum (mg KOH/g)

Seasoned laver products fried or treated with edible oil 3.0

~~1.2 [3.2.3 Peroxide value] \_\_\_\_\_ Maximum (meq/kg)~~

~~\_\_\_\_\_ Seasoned laver products fried or treated with edible oil \_\_\_\_\_ 60.0~~

### 1.3 Classification of Defectives

A container that fails to meet one or more of the applicable quality requirements, as set out in Section 3.2 and in the corresponding Annexes (except those based on sample averages), should be considered as a “defective”.

### 1.4 Lot Acceptance

A lot will be considered acceptable when the number of “defectives” as defined in Section 3.3 and in the corresponding Annexes does not exceed the acceptance number (c) of the appropriate sampling plan with an AQL of 6.5. For factors evaluated on a sample average, a lot will be considered acceptable if the average meets the specified tolerance, and no individual sample is excessively out of tolerance.

## 2. **{FOOD ADDITIVES}**

### 2.1 Dried Laver Products and Roasted Laver Product

No food additives, flavouring and processing aids are permitted.

~~2.1~~

### 2.2 Seasoned Laver Products

Only aAcidity regulators, anticaking agents, flavour enhancers, sweeteners, thickeners and antioxidants used in accordance with Tables 1 and 2 of the *General Standard of Food Additives (CODEX STAN 192-1995)* in food categories 04.2.2.23 through and 04.2.2.8 or listed in Table 3 of the *General Standard for Food Additives* are acceptable for use in seasoned laver products (see Section 2.3.3) conforming to this standard.

~~Colours and preservatives are not permitted.~~

In addition, the following food additives may be used.

INS	Name of Food additives	Maximum Level(mg/kg)
<u>Acidity Regulator</u>		
<u>334</u>	<u>Tartaric acid, L(+)-</u>	<u>500</u>
<u>336(i)</u>	<u>Monopotassium tartrate</u>	<u>60</u>
<u>Thickener</u>		
<u>459</u>	<u>Cyclodextrin, beta-</u>	<u>GMP</u>
<u>Sweeteners</u>		
<u>950</u>	<u>Acesulfame potassium</u>	<u>300</u>
<u>960</u>	<u>Steviol glycosides</u>	<u>900</u>
<u>Antioxidants</u>		
<u>319</u>	<u>Tertiary butylhydroquinone (TBHQ)</u>	<u>200</u>

#### 4.2.1 Flavourings

The flavourings used in the products covered by this standard should comply with the guidelines for the use of flavourings (CAC/GL 66-2008).

## 3. **CONTAMINANTS**

The products covered by this standard shall comply with the Maximum Levels of the *Codex General Standard for Contaminants and Toxins in Food and Feed (CODEX/STAN 193-1995)*. And the products covered by this standard shall comply with the maximum residue limits for pesticides established by the Codex Alimentarius Commission.

## 4. **HYGIENE**

It is recommended that the products covered by the provisions of this standard be prepared and handled in accordance with the appropriate sections of the *General Principles of Food Hygiene (CAC/RCP 1-1969)*, and other relevant Codex texts, such as Codes of Hygienic Practice and Codes of Practice.

The products should also comply with other microbiological criteria established in accordance with *Principles and Guidelines for the Establishment and Application of Microbiological Criteria Related to Foods (CAC/GL 21-1997)*.

~~Seaweeds used for laver products shall be grown and processed in areas and water appropriate for cultivation and processing of seaweeds for direct human consumption. After harvesting, raw seaweeds shall be treated with potable water<sup>1</sup> or clean sea water<sup>2</sup>. In the final step of processing for dried laver products, just before a drying process, the seaweeds shall be treated with potable water.~~

<sup>1</sup>CAC/RCP 52-2003

## 5. WEIGHTS AND MEASURES

### 5.1 [Net ContentsWeight]

The ~~weight-contents~~ of the product shall be expressed in the unit of weight (“g” or “kg”), ~~and/or~~ in the unit of the number of sheet, or in combination of these two.

#### 7.1.1 Classification of “Defectives”

A container that fails to meet the requirement for net contentsweight of Section 7.1 should be considered as a “defective”.

#### 7.1.2 Lot Acceptance

A lot should be considered as meeting the requirement of Section 7.1 when the number of “defectives”, as defined in Section 7.1.1, does not exceed the acceptance number (c) of the appropriate sampling plan with an AQL of 6.5.

### 7.2 [Packaging]

~~Laver products shall be packaged in a manner to protect and maintain hygienic, nutritional and quality attributes of the products to the extent reasonably practical. In addition, the products shall be packaged to protect them from moisture.~~

Packaging materials used for retail products shall be completely transparent except for printing areas, or completely opaque. In addition, the products shall be packaged to protect them from moisture.

4.——[

## 5. LABELLING]

In addition to the provisions of the *General Standard for the Labelling of Pre-packaged Foods* (CODEX STAN 1-1985), the following specific provisions apply:

### 5.1 The Name of the Product

The name of the products shall be in line with Section 2.3. Other appropriate names can be labelled in accordance with the law and custom in the country where the products are distributed in a manner not to mislead the consumer.

### 5.2 Labelling of Non-Retail Containers

Information on non-retail containers shall be given either on the container or in accompanying documents, except that the name of the products, lot identification, and the name and address of the manufacturer and/or packer shall appear on the container. However, lot identification, and the name and address of the manufacturer and/or packer may be replaced by an identification mark, provided that such a mark is clearly identifiable with the accompanying documents.

While non-retail product may contain edible foreign matters<sup>2</sup>, they shall be identified and appropriately communicated.

[Subsection labelling of net content]

[modified according to the discussion on net content]

## 6. METHOD OF ANALYSIS AND SAMPLING<sup>3</sup>

For checking the compliance with this standard, the methods of analysis and sampling contained in the *Recommended Methods of Analysis and Sampling* (CODEX STAN 234-1999) relevant to the provisions in this standard, shall be used.

### 6.1 Sampling

Sampling of lots for examination of the product shall be in accordance with the *General Guidelines on Sampling* (CAC/GL 50-2004).

<sup>2</sup> Sea creatures or sea plants which are not harmful to a human body and mixed unintentionally, unavoidably or naturally during the growing process in the sea.

<sup>3</sup> The listing of methods of analysis and sampling will be removed when the standard will be adopted by CAC.

## 6.2 Sensory and Physical Examination

Samples taken for sensory and physical examination shall be assessed by appropriately trained persons.

## 6.3 Method of Analysis

### 9.3.1 Preparation of Test Sample

#### 9.3.1.1 Moisture

Remove packaging materials from the test sample. Grind the sample with a grinder and store in a tightly sealed plastic bag.

#### 9.3.1.2 Acid value

##### (a) Extraction

Weigh 50 g<sup>4</sup> of test sample into 1000 mL Erlenmeyer flask. Add 500 mL of petroleum ether to the flask followed by replacing air in the flask by N<sub>2</sub> gas. Put a stopper on the flask and let stand for 2 hours. Decant the extracted solution (A) through a filter paper, on which Na<sub>2</sub>SO<sub>4</sub> is mounted to remove moisture, on a funnel into 1000 mL round flask-flat bottom. Add additional 250 mL of petroleum ether to residue in the Erlenmeyer flask and decant the extracted solution (B) into the round flask-flat bottom again as done previously. Evaporate the whole extracted solution (mixture of solution A and B) on the rotary evaporator in vacuum less than 40°C.

### 9.3.2 Method

Provision	Method	Principle	Type
Moisture Content	AOAC 925.45	Gravimetry, drying at atmospheric pressure	IV
Acid Value	AOCS Cd 3d-63	Titrimetry	I

<sup>4</sup> In case the determination is difficult due to the low acid value, take more amount of the sample.

## ANNEX I

**Sampling Plans**

The Appropriate inspection level is selected as follows :

**Inspection level I - Normal Sampling**

**Inspection level II - Disputes, (Codex referee purposes sample size) enforcement or need for better lot estimate**

SAMPLING PLAN 1

(Inspection Level I , AQL = 6.5)

<b>NET WEIGHT IS EQUAL TO OR LESS THAN 1KG (2.2 LB)</b>		
<b>Lot Size (N)</b>	<b>Sample Size (n)</b>	<b>Acceptance Number (c)</b>
4,800 or less	6	1
4,801 - 24,000	13	2
24,001 - 48,000	21	3
48,001 - 84,000	29	4
84,001 - 144,000	38	5
144,001 - 240,000	48	6
more than 240,000	60	7
<b>NET WEIGHT IS GREATER THAN 1KG (2.2 LB) BUT NOT MORE THAN 4.5KG (10 LB)</b>		
<b>Lot Size (N)</b>	<b>Sample Size (n)</b>	<b>Acceptance Number (c)</b>
2,400 or less	6	1
2,401 - 15,000	13	2
15,001 - 24,000	21	3
24,001 - 42,000	29	4
42,001 - 72,000	38	5
72,001 - 120,000	48	6
more than 120,000	60	7
<b>NET WEIGHT GREATER THAN 4.5KG (10 LB)</b>		
<b>Lot Size (N)</b>	<b>Sample Size (n)</b>	<b>Acceptance Number (c)</b>
600 or less	6	1
601 - 2,000	13	2
2,001 - 7,200	21	3
7,201 - 15,000	29	4
15,001 - 24,000	38	5
24,001 - 42,000	48	6
more than 42,000	60	7

## ANNEX II

**SAMPLING PLAN 2**  
(Inspection Level II , AQL = 6.5)

<b>NET WEIGHT IS EQUAL TO OR LESS THAN 1KG (2.2 LB)</b>		
<b>Lot Size (N)</b>	<b>Sample Size (n)</b>	<b>Acceptance Number (c)</b>
4,800 or less	13	2
4,801 - 24,000	21	3
24,001 - 48,000	29	4
48,001 - 84,000	38	5
84,001 - 144,000	48	6
144,001 - 240,000	60	7
more than 240,000	72	8
<b>NET WEIGHT IS GREATER THAN 1KG (2.2 LB) BUT NOT MORE THAN 4.5KG (10 LB)</b>		
<b>Lot Size (N)</b>	<b>Sample Size (n)</b>	<b>Acceptance Number (c)</b>
2,400 or less	13	2
2,401 - 15,000	21	3
15,001 - 24,000	29	4
24,001 - 42,000	38	5
42,001 - 72,000	48	6
72,001 - 120,000	60	7
more than 120,000	72	8
<b>NET WEIGHT GREATER THAN 4.5KG (10 LB)</b>		
<b>Lot Size (N)</b>	<b>Sample Size (n)</b>	<b>Acceptance Number (c)</b>
600 or less	13	2
601 - 2,000	21	3
2,001 - 7,200	29	4
7,201 - 15,000	38	5
15,001 - 24,000	48	6
24,001 - 42,000	60	7
more than 42,000	72	8