

PHILIPPINE NATIONAL STANDARD

PNS/BAFPS 111:2012
ICS 67.140.30

Philippine *Tablea*



BUREAU OF PRODUCT STANDARDS

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Foreword

This Philippine National Standard for Philippine *Tablea* provides the essential food safety and quality characteristics of roasted, ground, molded nibs of fermented pure (100 %) cacao beans without added ingredients and additives. Philippine *Tablea* is produced mostly by micro to small-scale processors and/or farmers in various regions in the Philippines. This standard ensures that the Philippine *Tablea* is safe to eat, of good quality and has export potential.

A Technical Working Group (TWG) was created to initially draft the standard for Philippine *Tablea* in 2011. The TWG was composed of representatives from the Food and Drug Administration (FDA) of the Department of Health (DOH), the Food and Nutrition Research Institute (FNRI) and Industrial Technology Development Institute (ITDI) of the Department of Science and Technology (DOST), the National Codex Organization and the private sector producing *Tablea*. Public consultations were conducted in Quezon, Bohol and Zamboanga to solicit comments and recommendations on the draft standard. *Tablea* samples from fifteen (15) different sources all over the Philippines were analyzed for pH, moisture, water activity, fat and filth to assess the quality and safety of the product. The comments and recommendations from the public consultations and the results of the laboratory analysis became the basis for the finalization of this Philippine National Standard in 2012.

Philippine *Tablea*

1 Scope

This standard applies to Philippine *Tablea*, made from pure (100 %) cocoa bean that has been fermented, roasted, ground and molded with no added ingredients and additives. The product is used for direct human consumption or as an ingredient in the manufacture of chocolate and chocolate products.

2 References

The titles of the standard publications referred to in this standard are listed on the inside back cover.

3 Definitions

For the purpose of this standard, the following definitions apply:

3.1**moisture content**

the percentage weight of water in relation to the dry weight of the product

3.2**crude fat**

true fats and oils, fatty acid esters, compound lipids, fat-soluble vitamins or provitamins, indigestible waxes, resins and essential oils obtained from fermented, roasted, grounded and molded cocoa beans with no added ingredients, additives and preservatives

3.3**pH**

measure of acidity and alkalinity used as a marker to indicate that no acid or neutralizer has been added to the cacao beans

3.4**Philippine *tablea***

roasted, ground and molded nibs of fermented pure (100 %) cacao beans without added ingredients and additives

3.5**water activity**

ratio of vapor pressure of water in the product to the vapor pressure of pure water at the same temperature. It is a measure of water available for the growth of microorganisms.

4 Essential composition and quality factors

4.1 Identity characteristics

4.1.1 Composition

Parameters	Value
pH at 25 °C	5.34 to 5.86
Moisture (%), max.	3
Water activity, max.	0.6
Crude fat content (g/100g)	45-55

4.2 Quality characteristics

4.2.1 Color, odor and taste

Philippine *Tablea* shall have a chocolate brown color, characteristic chocolate aroma, distinct chocolate flavor and a bitter taste.

5 Additives

Philippine *Tablea* shall have no additives.

6 Contaminants

Philippine *Tablea* shall comply with maximum levels of the Codex General Standard for Contaminants and Toxins in Food and Feed (CODEX STAN 193-1995) which falls under the category of cocoa (cacao) mass (cocoa/chocolate liquor).

7 Pesticide residues

Philippine *Tablea* shall comply with the maximum residue limits for pesticides established by the Codex Alimentarius Commission and adopted in the Philippine National Standard for Cacao or Cocoa Beans (PNS/BAFPS 58:2008).

8 Hygiene

It is recommended that the Philippine *Tablea* be prepared and handled in accordance with the appropriate sections of the following:

- A. Food and Drug Administration (FDA) Administrative Order 153 Series of 2004 on the Revised Guidelines on Current Good Manufacturing Practice in Manufacturing, Packing, Repacking or Holding Food;

- B. Code of Practice for Philippine *Tablea* (PNS/BAFPS 88:2012);
- C. FDA Bureau Circular No. 01-A Series of 2004 on Guidelines for the Assessment of Microbiological Quality of Processed Foods as follows:

D.

Product	Test/Microorganism	N	C	M	M
Chocolate Products	Molds cfu/g	5	2	10 ²	10 ⁴
	<i>Salmonella</i> /25g	10	0	0	
	Coliforms, MPN/g	5	2	<1.8	10 ²
	SPC/APC, cfu/g	5	2	10 ⁴	10 ⁶

where:

n is the number of sample units selected from a lot of food to be examined;

m is the acceptable level of microorganism determined by a specified method; the values are generally based on levels that are achievable under GMP;

M is the level which when exceeded in one or more samples would cause the lot to be rejected as this indicates potential health hazard or imminent spoilage; and

C is the maximum allowable number of defective or marginally acceptable unit.

- D. Recommended International Code of Practice-General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 4-2003), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice; and
- E. The products should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

9 Labeling

Each package of Philippine *Tablea* shall be securely sealed, marked clearly and indelibly with the following information:

- Name of product: "Philippine *Tablea*";
- Brand name or trade name;
- Net content – in metric weight, converted to other systems of measurement as may be required by importing countries which appears in a parenthesis after the metric system;
- Lot identification;

- Name and address of the manufacturer, packer and distributor;
- The phrase “Product of the Philippines”;
- Date manufactured and “Best Before”;
- Bar code (for retail);
- Instructions for use (for retail);
- Nutrition information (optional); and
- Storage instructions – Store in cool and dry condition protected from heat or direct sunlight.

The product shall also be labeled in accordance with the appropriate sections of the following:

- A. FDA Administrative Order No. 88-B series of 1984 on Rules and Regulations Governing the Labeling of Prepackaged Food Products Distributed in the Philippines; and
- B. Codex General Standard for Labeling of Pre-Packaged Foods (CODEX STAN 1-1985).

10 Methods of analysis and sampling

10.1 Determination of crude fat

According to AOAC 963.15– Soxhlet Extraction Method.

10.2 Determination of cadmium

According to AOAC 999.11 – Atomic Absorption Spectrophotometry

10.3 Determination of lead

According to AOAC 999.11 – Atomic Absorption Spectrophotometry

10.4 Determination of pH

According to AOAC 970.21

10.5 Determination of moisture

According to AOAC 931.04 - Gravimetric Method.

10.6 Determination of water activity

According to AOAC 978.18 - Novasina ms1 Water Activity Meter

References

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The following standards contain provisions which through reference in this text, constitute provisions of this standard. At the time of the publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on these standards are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

Bureau of Agriculture and Fisheries Product Standards – Department of Agriculture. Code of Practice for Philippine Cacao Beans (PNS/BAFPS 104: 2011).

Bureau of Agriculture and Fisheries Product Standards – Department of Agriculture. Code of Practice for Philippine *Tablea* (PNS/BAFPS 88:2012).

Bureau of Agriculture and Fisheries Product Standards – Department of Agriculture. Philippine National Standard for Cacao or Cocoa Beans (PNS/BAFPS 58:2008).

Codex Alimentarius Commission. Codex General Standard for Contaminants and Toxins in Food and Feed (CODEX STAN 193-1995).

Codex Alimentarius Commission. Codex General Standard for Labeling of Pre-Packaged Foods (CODEX STAN 1-1985).

Codex Alimentarius Commission. Codex Standard for Cocoa (Cacao) Mass (Cocoa/Chocolate Liquor) and Cocoa Cake (CODEX STAN 87-1983, Rev. 1-2001).

Codex Alimentarius Commission. Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

Codex Alimentarius Commission. Recommended International Code of General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 4 2003).

http://agromedia.ca/ADM_Articles/content/f1a1c1.pdf. Accessed last 02/06/12.

Philippine Food and Drug Administration –Department of Health. Guidelines for the Assessment of Microbiological Quality of Processed Foods (FDA Bureau Circular No. 01-A Series of 2004).

Philippine Food and Drug Administration –Department of Health. Philippine National Standard for Processed Pili Nut Products- Specification (PNS/FDA 28:2010/ICS 67.080.10).

Philippine Food and Drug Administration- Department of Health. Revised Guidelines on Current Good Manufacturing Practice in Manufacturing, Packing, Repacking or Holding Food (Administrative Order 153 Series of 2004).

Philippine Food and Drug Administration- Department of Health. Rules and Regulations Governing the Labeling of Prepackaged Food Products Distributed in the Philippines (Administrative Order No. 88-B series of 1984).

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