Distilled fermented coconut sap (Coconut lambanog)
Foreword

The Philippine National Standard (PNS) for Distilled fermented coconut sap (Coconut lambanog) was developed upon the initiative of the Local Government Unit (LGU) of Tayabas, Quezon, Department of Trade and Industry (DTI) Regional Office IV (Quezon) and the DTI – Center for International Trade Expositions and Mission (CITEM).

Recognizing the export potential of distilled coconut sap locally known as “coconut lambanog”, the Department of Agriculture (DA) created an inter-agency Technical Working Group (TWG) to specifically address the concern of the industry. The TWG is composed of the Bureau of Agriculture and Fisheries Product Standards (BAFPS), Food and Drug Administration (FDA), Philippine Coconut Authority (PCA), Industrial Technology Development Institute (ITDI), Bureau of Product Standards (BPS), Department of Trade and Industry (DTI) – Quezon and the LGU of Tayabas, Quezon.

The provisions of the standard apply to coconut lambanog and provide common language on product and process definition, essential composition and quality factors, packaging, hygiene and labeling requirements.
1 Scope

This standard applies to distilled fermented coconut sap or commonly known as “coconut lambanog” intended for direct human consumption, including such with flavor and/or flavors.

2 References

The titles of the standards 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:

3.1.1 coconut lambanog
colorless distilled spirit obtained by distilling naturally fermented coconut sap

3.1.2 naturally fermented coconut sap
coconut sap that is gathered and is usually left to ferment from 48 hours to 72 hours before distillation

3.1.3 coconut sap
the liquid oozing from the tapped unopened inflorescence of the coconut palm. In the Philippines, this is commonly known also as “coconut nectar”

3.1.4 alcohol content
percentage of alcohol content often expressed as a percentage of volume or weight

3.1.5 proof
a statement of alcohol content such that proof is two times the percentage of alcohol by volume.

4 Description of products

4.1 Product definition

Coconut lambanog is the product of the distillation of naturally fermented coconut sap.
4.2 Classification

4.2.1 Pure coconut lambanog

Refers to the unmodified coconut lambanog, the appearance of which is clear and colorless. The product shall have the distinct taste and aroma of coconut lambanog and should conform to the parameters set in Section 5. Coconut lambanog that underwent aging in wood or was added with wood shavings shall also be classified under this Section.

4.2.2 Flavored coconut lambanog

Refers to coconut lambanog with the addition of natural and/or artificial and nature-identical flavors and/or permitted food colors as approved by the Food and Drug Administration (FDA). The pure coconut lambanog used as base ingredient, should conform to the minimum requirements set in Section 5 of this standard.

4.3 Process Definition

Coconut lambanog is prepared by allowing the natural fermentation of harvested coconut sap for 48 to 72 hours followed by distillation.

5 Essential composition and quality factors

Coconut lambanog should conform with the following:

<table>
<thead>
<tr>
<th>Physico-chemical characteristics</th>
<th>Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol content, expressed as ethyl alcohol, minimum</td>
<td>30%</td>
</tr>
<tr>
<td>Methanol</td>
<td>The methanol content shall be in accordance with the provisions of BFAD M.C. No.13 s.1989: Methanol may be present in alcoholic beverages provided that it shall be derived from the natural alcohol fermentation process and not added.</td>
</tr>
<tr>
<td>Titratable acidity, expressed as acetic acid, maximum</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

6 Packaging

Coconut lambanog should be packed in any suitable and food grade glass container, polyethylene terephthalate (PET) bottles or high density polyethylene (HDPE) bottles.
7 Hygiene

The product(s) covered by the provisions of this standard shall be prepared or processed in accordance with the Guide Manual for Processing of the Industrial Technology Development Institute (ITDI) and should conform with the Bureau of Food and Drugs (BFAD) Administrative Order No. 153 series of 2004 on Revised Guidelines on Current Good Manufacturing Practices on Manufacturing, Packing, Repacking and Holding Food.

8 Labelling

The label of each package shall have the following minimum information:

1. Name of the product;
   a. Coconut lambanog – refers to pure coconut lambanog.
   b. Flavored Coconut Lambanog – refers to coconut lambanog with the addition of natural flavors or permitted food colors and/or flavors.

2. Brand name or trade name;

3. Net content (volume in metric system);

4. Alcohol content (proof or percent alcohol);

5. List of ingredients (for flavored lambanog) – complete list of ingredients and food additives used in the preparation of the product in descending order of proportion;

6. Lot identification number (LIN);

7. Name and address of manufacturer and/or bottler or distributor;

8. The phrase “Product of the Philippines”;

9. FDA License to Operate (LTO) Number;

10. FDA Certificate of Product Registration Number; and

11. Open Date Marking, Best Before, Consume Before or Use by Date (for Flavored lambanog).

9 Methods of analysis and sampling


AOAC Official Method of Analysis, Method No. 962.12, 16th ed. 1995
The following referenced documents are indispensable for the application of this document. For undated references, the latest edition of the referenced document (including any amendments) applies.


Association of Official Analytical Chemists AOAC 18th Edition. 2006. Alcohol by % volume (v/v) (i.e. ethanol and methanol) in distilled liquids – Gas Chromatography Method – AOAC 972.11


Plant Resources of South-East ASia 14: Vegetable oils and fats (editors Van der Vossen and Umali 2001) under the Cocos Nucifera L. chapter, pp76- 84 (JG. Ohler and S.S. Magat 2001).


Sanchez, Priscilla C. 1993. Philippines Recommend for Coconut. DOST-PCARRD

Section 117(a) of the Federal Alcohol Administration Act (27 as U.S.C. 211 (a)
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