

**ADMINISTRATIVE ORDER**

No. \_\_\_\_\_

**SUBJECT: Standard for Vinegar and Code of Practice for its Manufacture Repealing Administrative Order No. 134 s. 1970 “Regulation Prescribing the Standards of Identity and Quality of Vinegar (B-4.9 Condiments, Sauces, Seasoning)”**

**I. RATIONALE**

The Food and Drug Administration (FDA) is mandated to ensure the safety, efficacy or quality of health products through policy formulation and monitoring pursuant to Article II, Section 15 of the 1987 Philippine Constitution, Republic Act (RA) No. 9711 and RA 10611 and their Implementing Rules and Regulations wherein the State shall protect and promote the right to health of the people and instill health consciousness among them.

Section 9.a. of Article IV of the Implementing Rules and Regulations of RA 10611 indicates that “Standards shall be established on the basis of science, risk analysis, scientific advice from expert body/bodies, standards of other countries, existing Philippine National Standards (PNS) and the standards of the Codex Alimentarius Commission (Codex) where these exist and are applicable”

The Administrative Order No. 134 s. 1970 was promulgated in 1970 to provide the standard of identity and quality of vinegar. From traditional vinegar production, new technologies to accelerate the processing time and new variants from other raw materials have been developed. Hence, with these new innovations, there is a need to revisit the standard and code of practice of vinegar to provide an updated guidance on the identity of the product and its processing procedures.

This Order is hereby promulgated to prescribe the updated standard and code of practice for vinegar.

**II. OBJECTIVE**

This Order aims to provide guidelines for food business operators (FBOs) on the manufacture of vinegar.

Specifically, this Order aims to:

- A. Provide updated standards on the identity and quality of vinegar; and
- B. Provide guidelines on the code of practice for processing and handling vinegar.

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2 **III. SCOPE OF APPLICATION**  
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4 This Order shall cover FBOs engaged in the manufacture, trade, repacking, and  
5 distribution of vinegar in the Philippine market.  
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8 **IV. DEFINITION OF TERMS**  
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10 For the purpose of this issuance, the following terms shall be defined as follows:  
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12 A. **Accelerated Fermentation** refers to the fermentation process hastened through  
13 the use of specialized equipment, such as an acetator.  
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15 B. **Acetous Fermentation** refers to the natural transformation of sugars or  
16 processed starches into ethanol using yeast (*Saccharomyces cerevisiae*) and  
17 subsequently converted into acetic acid through acetic acid bacteria  
18 (*Acetobacter aceti*).  
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20 C. **Distilled Vinegar** refers to the liquid produced by acetous fermentation of  
21 dilute distilled alcohol or by the distillation of the vinegar.  
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23 D. **Fermentation** refers to the chemical process of converting starch or sugars into  
24 alcohol or acid.  
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26 E. **Ingredient** refers to any substance including food additives, used as a  
27 component in the manufacture or preparation of a food and present in the final  
28 product in its original or modified form.  
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30 F. **Labelling** refers to any written, printed or graphic matter (1) upon any article  
31 or any of its container or wrappers or (2) accompanying the packaged food.  
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33 G. **Mother Vinegar** refers to the gooey film that appears on the surface of the  
34 alcohol product as it is covered to vinegar. It is a natural carbohydrate called  
35 cellulose. This film holds the highest concentration of acetobacters. It is  
36 skimmed off the top and added to subsequent batches of alcohol to speed the  
37 formation of vinegar. Acetozym nutrients are the manmade mother of vinegar  
38 in a powdered form.  
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40 H. **Natural Vinegar** refers to the vinegar produced by acetous fermentation with  
41 or without alcoholic fermentation of exclusively the following raw materials:  
42 coconut sap, nipa, kaong or buri palm; cane sugar (including unrefined crystal  
43 sugar and refinery syrups); molasses; honey; cereal grains; malt, fruit or  
44 vegetable extracts, cider, wine, alcoholic liquors of agricultural origin, and other  
45 sugar- or starch-containing materials.  
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- 1 I. **Vinegar** refers to the liquid produced by alcoholic and/or acetous fermentations  
2 of one or more of the following: malt, spirit, wine, cider, alcoholic liquors, fruits  
3 (e.g., mango, coconut, pineapple), grain, vegetables, honey, glucose, sugar  
4 (including unrefined crystal sugar and refinery sugar), or molasses.  
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6 **V. GENERAL GUIDELINES**  
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- 8 A. The products covered shall comply with the standards of identity and code of  
9 practice indicated in the Order and shall be encoded in the application for FDA  
10 Certificate of Product Registration as part of the documentary requirements.  
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12 B. The products covered shall be prepared and handled in accordance with the  
13 appropriate sections of the FDA AO No. 153 s. 2004 – Revised Guidelines on  
14 Current Good Manufacturing Practice in the Manufacturing, Packing,  
15 Repacking or Holding Food and/or the General Principles of Food Hygiene  
16 (CXC 1-1969 Rev. 2020), and their future amendments.  
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18 C. It shall be labeled in accordance with AO No. 2014-0030 or the “Revised Rules  
19 and Regulations Governing the Labeling of Prepackaged Food Products Further  
20 Amending Certain Provisions of AO No. 88-B s. 1984” and its future  
21 amendments.  
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23 D. The FBOs exporting their vinegar products shall comply with Administrative  
24 Order 2014-0029 “Rules and Regulations on the Licensing of Food  
25 Establishment and Registration of Processed Food and Other Food Products,  
26 and For Other Purposes,” as well as the rules and regulations of the importing  
27 country.  
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29 **VI. SPECIFIC GUIDELINES**  
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31 A. Ingredients  
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33 1. Basic Ingredients  
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35 The following raw materials may be used for vinegar production:

- 36 a. Sap of coconut, nipa, kaong, and buri palm;  
37 b. Agricultural products containing starch and/or sugars including but  
38 not limited to: fruits, sugar cane, berries, cereal grains, malted  
39 barley, whey, and honey;  
40 c. Fruit wine, cider;  
41 d. Alcohol of agricultural origin; and  
42 e. Yeast;  
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44 2. Optional Ingredients  
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46 Applicable food additives may be used in accordance with the prescribed  
47 limit of use as indicated in the Bureau Circular No. 2006-016 entitled

1 “Updated List of Food Additives”, Codex Stan 192-1995 entitled “General  
2 Standard for Food Additives” and their latest amendments.

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4 B. Hygiene

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6 The product shall comply with the appropriate sections of the FDA AO No. 153  
7 s. 2004 “Guidelines, Current Good Manufacturing Practices in the  
8 Manufacturing, Packing, Repacking or Holding Food” and/or the Codex  
9 Alimentarius General Principles of Food Hygiene (CAC-RCP 1 – 1969, Rev. 4-  
10 2022), and their future amendments.

11 It shall not contain vinegar eels or substantial quantities of other suspended  
12 matters and sediment.

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14 C. Production and Process Control

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16 1. Natural Fermentation

- 17 a. Sap or extract is collected in an appropriate and clean container.  
18 b. The collected sap or extract is placed in earthen, glass jars, or other  
19 appropriate containers for fermentation.  
20 c. The sap or extract is fermented with yeast (*Saccharomyces*  
21 *cerevisiae*) or mother vinegar until the required 3% acetic acid  
22 (w/w) is attained.

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24 2. From Alcoholic Product or Wine

- 25 a. *Acetobacter aceti* is added to the alcoholic product (e.g., wine) to  
26 commence acetic fermentation.  
27 b. It is left to ferment until the required 4% w/w acetic acid is achieved.

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29 3. Accelerated Fermentation

- 30 a. Alcohol liquor and unpasteurized mother vinegar are added to the  
31 acetator.  
32 b. Air supply is added and air pressure of the acetator is adjusted as the  
33 feed increases.  
34 c. When the total acidity increases after the initial stage of  
35 fermentation, alcoholic liquor is added until it reaches 4% titratable  
36 acid and until the drum is  $\frac{3}{4}$  full.  
37 d. Once 4% TA is met, harvest of the product may commence.

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39 D. Quality Factor

40 **Table 1.** Total Acidity, calculated as % Acetic Acid

Vinegar	% Acidity as Acetic Acid	Method of Analysis
1. Vinegar from Alcoholic Product or Wine, and produced through	4% w/w, minimum	AOAC 930.35

Accelerated Fermentation		
2. Natural Vinegar (e.g., Nipa Sap Vinegar, etc.)	3% w/w, minimum	

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**Table 2. Contaminants**

Contaminant	Limits	Method of Analysis
1. Lead	2.0 mg/kg, maximum	AOAC 972.23 or other validated/verified method
2. Arsenic	1.0 mg/kg, maximum	AOAC 952.13 or other validated/verified method

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Method of sampling shall be in accordance with the FAO/WHO Codex Alimentarius Sampling Plans for Prepackaged Foods (CAC/RM 42-1969), Codex Alimentarius Volume 13, 1994 (Annex E), and its series of subsequent amendments.

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**E. Packaging**

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1. Vinegar shall be packed in appropriate food-grade primary packaging materials that will maintain its integrity during storage and transport.
2. Packaging options for the product may include but are not limited to the following:
  - a. glass bottles;
  - b. polyethylene terephthalate (PET) bottles;
  - c. high density polyethylene (HDPE) bottles; and
  - d. PET/ polyethylene (PE) stand-up pouches
3. All packaging materials/containers except glass bottles and caps/closures must be certified as food grade and have been tested for overall migration or product-package compatibility test.
4. The product shall occupy not less than 90% volume by volume (v/v) of the capacity of the container.

**F. Product Naming**

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1. Vinegar shall be named in accordance with its identity.
  - a. Vinegar produced from only one raw material shall be named as “X Vinegar” or “Sukang X”, where “X” is the name of the substrates of origin used. “X” shall appear in letters of the same

1 type size, style, and color as in the word “VINEGAR” or  
2 “SUKANG” (e.g., Cane Vinegar, Sukang Iloko, Sukang Tuba).

- 3 b. The name “DISTILLED VINEGAR” shall be printed in letters  
4 of the same type size, style, and color.  
5 c. Where an ingredient has been added in accordance with Section  
6 VI.A, which imparts to the vinegar the distinctive flavor of the  
7 ingredient(s), the name of the product shall be accompanied by  
8 an appropriate descriptive term. E.g., Coconut Vinegar,  
9 Pineapple Vinegar, Mango Vinegar.  
10 d. The term “SUKANG PAOMBONG” and “SUKANG SASA”  
11 shall be used exclusively for vinegar produced from nipa sap in  
12 which no cloudifiers have been added.  
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- 14 2. The name of the product shall prominently appear on the principal display panel  
15 of the label.  
16 3. Products that do not conform with the prescribed standards in this Order shall  
17 not be allowed to use “Vinegar” as the product name or description on the label.  
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#### 19 G. Labelling

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21 Each retail container shall be labeled and marked with the information in  
22 accordance with AO 2014-0030 “Revised Rules and Regulations Governing The  
23 Labeling of Prepackaged Food Products Further Amending Certain Provisions of  
24 Administrative Order No. 88-B s. 1984 or the “Rules and Regulations Governing  
25 the Labeling of Prepackaged Food Products Distributed in the Philippines,” and  
26 For Other Purposes” and its future amendments.  
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- 28 a. A complete list of ingredients shall be declared in descending order of  
29 proportion.  
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31 b. Food additives used shall be declared by indicating their common name  
32 and their functional categories provided under Bureau Circular No.  
33 2006-016 and its latest amendments.

34 Examples: Caramel III as color or Food color (Caramel)

35 H. All vinegar shall not contain any mineral acid.  
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37 I. Vinegar containing any artificial matter such as synthetic acetic acid or cloudifying  
38 agent shall be deemed to be adulterated and its sale is thereby prohibited.  
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### 40 VII. SEPARABILITY CLAUSE

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42 If any provision of this Order is declared unconstitutional or invalid by any  
43 court of law or competent authority, the remaining provisions not affected thereby  
44 shall remain valid and effective.  
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1 **VIII. PENALTY CLAUSE**

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3 Any establishment found in violation of any provision of this issuance after  
4 the transitory period shall be subject to the applicable penalties and sanctions  
5 indicated in RA No. 9711 and RA No. 10611 and their respective Implementing  
6 Rules and Regulations.  
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8 **IX. TRANSITORY PROVISIONS**

9 Food establishments engaged in the manufacture, trade, repacking, and  
10 distribution of vinegar for the Philippine market are given a transitory period of  
11 twelve (12) months to comply with these guidelines.  
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13 **X. MONITORING AND REVIEW CLAUSE**

14 This Order shall be reviewed and evaluated within three (3) years of its  
15 implementation to determine whether the policy’s objectives, impact, and  
16 effectiveness are achieved.  
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18 **XI. REPEALING CLAUSE**

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20 Administrative Order No. 134 s. 1970 entitled “Regulation Prescribing the  
21 Standards of Identity and Quality of Vinegar (B-4.9 Condiments, Sauces,  
22 Seasoning)” are hereby repealed. Other issuances or parts thereof which are found  
23 to be inconsistent with the provisions of this AO are hereby repealed accordingly.  
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25 **XII. EFFECTIVITY**

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27 This Order shall take effect after fifteen (15) days following the publication  
28 in the Official Gazette or in a newspaper of general circulation and filing with the  
29 Office of the National Administrative Register of the UP Law Center.  
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33 **DR. TEODORO J. HERBOSA**  
34 **SECRETARY OF HEALTH**  
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36 DTN: 20230213102709  
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2 **ANNEX A**

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5 **METHODS OF SAMPLING AND ANALYSIS**

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8 a. Method of Sampling

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10 Sampling shall be in accordance with the FAO/WHO Codex Alimentarius  
11 Sampling Plans for Prepackaged Foods (CAC/RM 42-1969), Codex  
12 Alimentarius Volume 13, 1994 (Annex E), and its series of subsequent  
13 amendments.

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15 b. Methods of Analysis

16 Total Acid as acetic acid – AOAC 930.35

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18 Heavy Metals:

19 Arsenic- AOAC 952.13 or other validated/verified method

20 Lead- AOAC 972.23 or other validated/verified method  
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