Vinegar — Specification — Part 1: Vinegar from natural sources
Compliance with this standard does not, of itself confer immunity from legal obligations

A Uganda Standard does not purport to include all necessary provisions of a contract. Users are responsible for its correct application.
National foreword

Uganda National Bureau of Standards (UNBS) is a parastatal under the Ministry of Trade, Industry and Cooperatives established under Cap 327, of the Laws of Uganda, as amended. UNBS is mandated to coordinate the elaboration of standards and is

(a) a member of International Organisation for Standardisation (ISO) and

(b) a contact point for the WHO/FAO Codex Alimentarius Commission on Food Standards, and

(c) the National Enquiry Point on TBT Agreement of the World Trade Organisation (WTO).

The work of preparing Uganda Standards is carried out through Technical Committees. A Technical Committee is established to deliberate on standards in a given field or area and consists of representatives of consumers, traders, academicians, manufacturers, government and other stakeholders.

Draft Uganda Standards adopted by the Technical Committee are widely circulated to stakeholders and the general public for comments. The committee reviews the comments before recommending the draft standards for approval and declaration as Uganda Standards by the National Standards Council.


The committee responsible for this document is Technical Committee UNBS/TC 2, Food and agriculture Subcommittee SC 4, Fruits, Vegetables, Spices and related products.

This Second edition cancels and replaces the first edition, US 212-1:2000/EAS 147-1 Vinegar - Specification Part 1: Vinegar from natural sources, which has been technically revised.

Wherever the words, "East African Standard" appear, they should be replaced by "Uganda Standard."
Vinegar — Specification — Part 1: Vinegar from natural sources
Foreword

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

The Community has established an East African Standards Committee (EASC) mandated to develop and issue East African Standards (EAS). The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the public and private sector organizations in the community.

East African Standards are developed through Technical Committees that are representative of key stakeholders including government, academia, consumer groups, private sector and other interested parties. 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 Principles and procedures for development of East African Standards. XXXXXX.

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.

The committee responsible for this document is Technical Committee EASC/TC 006, Spices culinary herbs and condiments.

This second edition cancels and replaces the first edition (EAS 147-1:1999), which has been technically revised.

Attention is drawn to the possibility that some of the elements of this document may be subject of patent rights. EAC shall not be held responsible for identifying any or all such patent rights.
Vinegar — Specification — Part 1: Vinegar from natural sources

1 Scope

This Draft East African Standard specifies requirements and methods of sampling and test for vinegar from natural sources intended for human consumption.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

CODEX STAN 192, General standards for food additives

CODEX STAN 193, Codex general standards for contaminants and toxins in food and feed

EAS 38, General standard for the labelling of pre-packaged foods

EAS 39, Code of practice for hygiene in the food and drink manufacturing industry

EAS 104, Alcoholic beverages — Method of sampling and test

ISO 948, Spices and condiments — Sampling

ISO 7952, Fruits, vegetables and derived products — Determination of copper content — Method sing flame atomic absorption spectrometry

ISO 9526, Fruits, vegetables and derived products — Determination of iron content by flame atomic absorption spectrometry

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1 vinegar
liquid, produced exclusively from a suitable raw material of agricultural or silvicultural origin by the process of double fermentation (alcoholic and acetous) and contains a specified amount of acetic acid.

3.2 wine vinegar
vinegar obtained from grape juice or wine by acetous fermentation

3.3 fruit wine vinegar and cider vinegar
vinegar obtained by acetous fermentation from wine of fruit or cider,. The products may also be obtained from fruit by the process defined in 3.1.
3.4 spirit vinegar
vinegar obtained by acetous fermentation of distilled alcohol of agricultural origin

3.5 grain vinegar
vinegar obtained without intermediate distillation by the process defined in 3.2, from any cereal grain, the starch of which has been converted to sugars by a process other than solely by the diastase of malted barley

3.6 malt vinegar
vinegar obtained without intermediate distillation by the process defined in 3.2, from malted barley, with or without the addition of cereal grains, the starch of which has been converted to sugars solely by the diastase of the malted barley

3.7 distilled malt vinegar
vinegar produced by the distillation of malt vinegar as defined in 3.6 above under reduced pressure. It contains only the volatile constituents of the malt vinegar from which it is derived.

3.8 whey vinegar
vinegar obtained from whey fermentation, without intermediate distillation by the process defined in 3.2

3.9 honey vinegar
vinegar obtained from honey wine, without intermediate distillation, by the process of acetous fermentation

4 Requirements

4.1 Ingredients

4.1.1 Raw materials shall include the following:

a) products of agricultural origin containing starch, or starch and sugars, including but not limited to fruit, cereal grains, malted barley, whey and honey.

b) wine of grapes or other fruits, cider.

c) distilled alcohol of agricultural origin.

4.1.2 The following ingredients may be added to vinegar in amount necessary to impart a distinctive flavour:

a) whey;

b) fruit juices or their equivalent of concentrated fruit juices;

c) sugars;

d) honey; and

e) salt.

4.1.3 Processing aids which include Nutrients for Acetobacter (such as yeast extracts and autolysates and amino acids) and nutrient salts may be used
4.2 Specific requirements

4.2.1 Vinegar shall comply with the requirements in Table 1.

<table>
<thead>
<tr>
<th>S/No.</th>
<th>Characteristic</th>
<th>Type of vinegar</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Malt</td>
<td>Fruit and Cider</td>
</tr>
<tr>
<td>i)</td>
<td>Total acid content, g/l, min.¹</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>ii)</td>
<td>Residual alcohol content, %, v/v, max.</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>iii)</td>
<td>Soluble solids, degree brix, max.</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>iv)</td>
<td>pH,</td>
<td>2.4-3.0</td>
<td>2.4-3.0</td>
</tr>
<tr>
<td>v)</td>
<td>Ash, %, m/m, max.</td>
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<td>0.45</td>
</tr>
<tr>
<td>vi)</td>
<td>Copper, mg/Kg</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>vii)</td>
<td>Iron, mg/Kg</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

NOTE: Vinegar should contain not more than the amount of acid as acetic acid that may be retained through the use of biological fermentation.

¹ Calculated to 1 % acetic acid

5 Food additives

Use of food additives and in vinegar shall be in accordance with Codex Stan 192.

6 Contaminants

Heavy metals in vinegar shall not exceed maximum residue limit as stipulated in Codex Stan 193.

7 Hygiene

Vinegar from natural sources shall be manufactured and handled in a hygienic manner in accordance with EAS 39.

8 Weights and Measures

The volume and fill of the container shall comply with the Weights and Measures regulations of Partner States or equivalent legislation.

9 Packaging

Vinegar shall be packaged in food grade containers, which protect the product from damage without reacting with the product.

10 Labelling

10.1 The product shall be legibly and indelibly labelled in compliance with the requirements of EAS 38. In addition the following information shall appear legibly on each container:
a) name of the product;
   i) A product manufactured from only one raw material shall be denominated ‘X vinegar’, where ‘X’
      the name of the raw material used.
   ii) A product manufactured from more than one raw material shall be denominated ‘Y vinegar’,
      where ‘Y’ constitutes a complete list of the raw materials used in descending order of proportion.
   iii) Where an ingredient has been added, which imparts to the food the distinctive flavour of the
      ingredient or ingredients, the name shall be accompanied by an appropriate descriptive term.

b) brand name or trademark if any;

c) list of ingredients;

d) minimum total acid content % as acetic;

e) net volume of contents;

f) name, physical location and full address of manufacturer, packer, distributor, importer, exporter or vendor
   of the food shall be declared;

g) date of manufacture;

h) country of origin;

i) batch number;

j) Storage conditions

k) Instructions of use

10.2 Labelling of non-retail containers

The following specific provisions apply to the labelling of non-retail containers:

a) Information in 10.1 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 shall
   appear on the containers.

b) Lot identification and the name and address of the manufacturer or packer may be replaced by an
   identification mark, provided that such a mark is clearly identifiable with the accompanying document.

11 Sampling

Sampling shall be carried out in accordance with ISO 948.