



PCD 330: 2022

ICS 71.100.60

DRAFT ZANZIBAR NATIONAL STANDARD

Essential oil of Cinnamon leaf - Specification

DRAFT FOR STAKEHOLDER'S COMMENT

ZANZIBAR BUREAU OF STANDARDS

Foreword

This draft Zanzibar standard has been developed Cooking and Essential Oil Standard Technical committee (TCFA4). In accordance with ZBS general procedures, this draft standard is presented to the public in order to receive any technical and editorial comment concerns.

The Zanzibar Bureau of Standard (ZBS) was established under Standard Act No. 1 of 2011.

Zanzibar Bureau of Standards (ZBS)
P.O.Box 1136
Zanzibar
Tel: +255 24 2232225
Fax: +255 24 2232225
E-mail: info@zbs.go.tz
Web: www.zbs.go.tz

Essential oil of Cinnamon leaf -specification

1 Scope

This draft Zanzibar National Standard specifies requirements, methods of sampling and test for Essential oil of Cinnamon leaf derived from *Cinnamomum zeylanicum*

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 193, *General Standard for Contaminants and Toxins in Foods*

ISO 212, *Essential oils — Sampling*

ISO 279, *Essential oils — Determination of relative density at 20 °C — Reference method*

ISO 280, *Essential oils — Determination of refractive index*

ISO 592, *Essential oils — Determination of optical rotation*

ISO 7359, *Essential oils — Analysis by gas chromatography on packed columns — General method*

ISO 7609, *Essential oils — Analysis by gas chromatography on capillary columns — General method*

ISO 8432, *Essential oils — Analysis by high performance liquid chromatography — General method*

ISO/TR 11018, *Essential oils — General guidance on the determination of flashpoint*

ZNS 94, *Rounding off numerical values*

3 Terms and definitions

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

3.1

essential oil of Cinnamon leaf

oil obtained by steam distillation of the leaves of *Cinnamomum zeylanicum*

4 Requirements

4.1 Raw material

Essential oil of Cinnamon leaves shall be extracted by steam distillation of leaves and twigs of *Cinnamomum zeylanicum*

4.2 General requirement

Essential oil of Cinnamon leaf shall

- a) be clear and mobile liquid
- b) have Characteristic of spice like odour reminiscent of eugenol and cinnamaldehyde,
- c) have radish brown to dark brown
- d) be free from sediment and suspended matter

- e) be free from admixture with other oils when tested according to appropriate method

4.3 Specific requirement

Essential oil of Cinnamon leaf shall comply with specific requirements given in table 1 when tested in accordance with test methods specified therein.

Table 1: Specific requirements

S/N	Characteristic	requirements	method of test
i.	Relative density at 20 °C/water at 20 °C	1.037- 1.053	ISO 279
ii.	Refractive index at 20 °C	1.527-1.540	ISO 280
iii.	Optical rotation at 20 °C	-2.5° to +2°	ISO 592
iv.	eugenol content %	70-83	ISO 7609/ISO 7359/ISO 8432
v.	Cinnamaldehyde %	3-7	
vi.	miscibility in ethanol 70% at 20 °C (V/V) %	1:2	ISO 875
vii.	phenol content	75-85	ISO 1272
viii.	flash point	+88	ISO/TR 11018

5 Contaminants

5.1 Pesticide residues

Essential oil of Cinnamon leaf shall comply with pesticide residue limits established by the Codex Alimentarius Commission for this commodity.

5.2 Heavy metal

Heavy metal in Essential oil of Cinnamon leaf shall not exceed maximum residue limits as established in the Codex stan 193

6 Weights and measures

Essential oil of Cinnamon leaf shall be packaged in accordance with the Zanzibar weights and measures regulations.

7 Packaging and labelling

7.1 Packaging

Essential oil of Cinnamon leaf shall be packaged in grade containers and sealed in manner to ensure the safety and quality requirements specified in this standard are maintained throughout the shelf life of the product.

7.2 Labelling

7.2.1 Essential oil of cinnamon leaf shall be legibly and indelibly labelled with the following:

PCD 330: 2022

- a) name of the product 'Essential oil of cinnamon leaf (Latin name including the botanical authority) of the plant, and part of the plant from which it is obtained
- b) brand name/trade name if any;
- c) date of manufacture;
- d) best before date;
- e) the percentage of the eugenol and cinnamaldehyde content
- f) name and physical address of the manufacturer or packer or the distributor;
- g) directions for use and storage condition
- h) lot identification or batch or code number;
- i) net weight in metric unit; and
- j) country of origin.

7.2.2 The language on the label shall be 'Kiswahili' and/or English. Additional language may be used depending on the designated market.

8 Sampling

Sampling of Essential oil of cinnamon leaf shall be done according to ISO 212