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ICS 71.100.60

DRAFT ZANZIBAR NATIONAL STANDARD

Essential oil of *Eucalyptus citriodora* -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.

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Essential oil of *Eucalyptus citriodora*

1 Scope

This draft Zanzibar National Standard specifies requirements, methods of sampling and test for Essential oil of *Eucalyptus* derived from *Corymbia citriodora* and *Eucalyptus citriodora* Hook.

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 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 1271, *Essential oils — Determination of carbonyl value — Free hydroxylamine method*

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

ISO 212, *Essential oils — Sampling*

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 *Eucalyptus citriodora*

oil obtained by steam distillation of the leaves and twigs of *Corymbia citriodora* (Hook.) K.D. Hill and L.A.S. Johnson of the Myrtaceae family

4 Requirements

4.1 Raw material

Essential oil of *Eucalyptus citriodora* shall be extracted by steam distillation of the leaves and twigs of *Corymbia citriodora* (Hook.) K.D. Hill and L.A.S. Johnson.

4.2 General requirement

Essential oil of *Eucalyptus citriodora* shall

- a) be clear and mobile liquid
- b) have odour of Characteristic, recalling that of citronellal
- c) have colourless to pale yellow
- 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 *Eucalyptus citriodora* shall comply with specific requirements given in table 1 when tested in accordance with test methods specified therein.

Table 1: Specific requirements of *Eucalyptus citriodora* oil

S/N	Characteristic	requirements	Method of test
i.	Relative density at 20 °C/water at 20 °C	0.860 -0.880	ISO 279
ii.	Refractive index at 20 °C	1.450 - 1.460	ISO 280
iii.	Optical rotation at 20 °C	-1° to +3°	ISO 592
iv.	citronellal content %	70-85	ISO 1271
v.	Miscibility in ethanol 70% at 20 °C (V/V) %,	1:4	ISO 875
vi.	Flash point °C	+78	ISO/TR 11018

5 Contaminants

5.1 Pesticide residues

Essential oil of *Eucalyptus citriodora* 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 *Eucalyptus citriodora* shall not exceed maximum residue limits as established in the Codex stan 193

6 Weights and measures

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

7 Packaging and labelling

7.1 Packaging

Essential oil of *Eucalyptus citriodora* 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 *Eucalyptus citriodora* shall be legibly and indelibly labelled with the following:

- a) name of the product '*Eucalyptus citriodora* oil (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 citronellal 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;

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j) country of origin; and

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 Eucalyptus citriodora shall be done according to ISO 212

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