



AFDC 4 (4521) DTZS/
REV.TZS 1432:2020
ICS: 67.200.20

DRAFT TANZANIA STANDARD

Edible olive oil and edible olive pomace oil — Specification

DRAFT STANDARD

TANZANIA BUREAU OF STANDARDS

Copyright notice

This document is copyright-protected by Tanzania Bureau of Standards. Neither this document nor any extract from it may be reproduced, stored or transmitted in any form for any other purpose without prior written permission from TBS.

Requests for permission to reproduce this document for the purpose of use should be addressed as shown below:

© *Tanzania Bureau of Standards 2025 — All rights reserved*
Tanzania Bureau of Standards
P.O. Box 9524,
398 Morogoro Road, 16103 Ubungo,
Dar es Salaam,
Tanzania
Tel: + 255 222 450206
E-mail: info@tbs.go.tz
Web: www.tbs.go.tz

Reproduction for sales purposes may be subject to royalty payments or a licensing agreement. Violators may be prosecuted.

0 Foreword

This Tanzania Standard was published under the authority of the Board of Directors of Tanzania Bureau of Standards.

Tanzania Bureau of Standards (TBS) is the statutory national standards body for Tanzania established by the Standards Act Cap. 130.

Tanzania Standards are developed through Technical Committees that are representative of key stakeholders including government, academia, consumer groups, private sector and other interested parties. The Technical Committees work under the supervision of Divisional (sectoral) Committees. The Standards are developed in accordance with the Guide and Procedure for Development of Tanzania Standards and TZS 0, *Guide for presentation of Tanzania Standards*.

Tanzania Standards are subject to review, to keep pace with science and technological advances. Users of the Tanzania Standards are therefore expected to ensure that they always have the latest versions of the standards they are implementing.

This Tanzania Standard was developed under the supervision of Agriculture and Food Divisional Standards Committee [AFDC]. The Technical Committee responsible for the standard is AFDC 04, Edible fats and oils

This (*second edition*) cancels and replaces the first edition (TZS 1432:2020), which has been technically revised.

The reporting of the results of a test or analysis made in accordance with this Tanzania Standard, if the final value, observed or calculated is to be rounded off, shall be done in accordance with TZS 4.

Edible olive oil and edible olive pomace oil — Specification

1 Scope

This Tanzania Standard specifies the requirements, sampling and test methods for edible olive oil and edible olive pomace oil intended for direct 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.

CXS 192, General standards for food additives

CXS 193, General standard for contaminants and toxins in food and feed

TZS 4, Rounding off numerical values

TZS 54, Animal and vegetable fats and oils — Sampling

TZS 109, Food processing units – Code of hygiene — General

TZS 288-1, Animal and vegetable fats and oils — Preparation of methyl esters of fatty acids

TZS 288-2, Animal and vegetable fats and oils — Analysis by gas chromatography of methyl esters of fatty acids

TZS 538, Packaging and labeling of foods-General requirements

TZS 1313, Fortified edible oils and fats — Specification

TZS 1322, Oils and fats — Sampling and test methods — Purity tests

TZS 1324, Animal and vegetable fats and oils — Determination of peroxide value — Iodometric (visual) end point determination

TZS 1325, Animal and vegetable fats and oils — Determination of saponification value

TZS 1326, Animal and vegetable fats and oils — Determination of moisture and volatile matter

TZS 1327, Animal and vegetable fats and oils — Determination of iodine value

TZS 1328, Essential oils — Determination of relative density at 20 °C — Reference method

TZS 1329, Animal and vegetable fats and oils — Determination of refractive index

TZS 1331, Animal and vegetable fats and oils — Determination of acid value and acidity

TZS 1332, Animal and vegetable fats and oils — Determination of unsaponifiable matter — Method using diethyl ether extraction

TZS 1335, Animal and vegetable fats and oils — Determination of copper, iron and nickel content — Graphite furnace atomic absorption

TZS 1336, Animal and vegetable fats and oils — Determination of insoluble impurities content

TZS 1368, Animal and vegetable fats and oils — Determination of ultraviolet absorbance expressed as specific UV extinction

TZS 1371, Animal and vegetable fats and oils — Determination of individual and total sterol contents -Gas chromatographic method

TZS 1372, Olive oils and olive pomace oils — Determination of wax content by capillary gas chromatography

TZS 2446, Oils and Fats — Determination of the difference between actual and theoretical content of triacylglycerols with ECN 42 in olive oils

3 Terms and definitions

For the purpose of this Tanzania Standard the following terms and definitions shall apply:

3.1

edible olive oil

edible oil obtained solely from the fruit of the olive tree (*Olea europaea* L.), to the exclusion of oils obtained using solvents or re-esterification processes and of any mixture with oils of other kinds.

3.2

extra virgin olive oil

virgin olive oil with a free acidity, expressed as oleic acid, of not more than 0.8 g per 100 g and whose other characteristics correspond to those laid down for this category

3.3

virgin olive oils

oils obtained from the fruit of the olive tree (*Olea europaea* L.) solely by mechanical or other physical means under conditions, particularly thermal conditions, that do not lead to alterations in the oil, and which have not undergone any treatment other than washing, decanting, centrifuging and filtration

3.4

olive-pomace oil

olive oil that is extracted from olive pulp after the first press treated with solvents or other physical treatments, to the exclusion of oils obtained by re-esterification processes and of any mixture with oils of other kinds

3.5

refined olive oil

olive oil obtained from virgin olive oils by refining methods which do not lead to alterations in the initial glyceridic structure

3.6

refined olive-pomace oil

oil obtained from crude olive-pomace oil by refining methods which do not lead to alterations in the initial glyceridic structure

3.7

olive-pomace oil composed of refined olive-pomace oil and virgin olive oils

olive-pomace oil consisting of a blend of refined olive-pomace oil and extra virgin olive oil and/or virgin olive oil. It has a free acidity, expressed as oleic acid, of not more than 1 gram per 100 grams and its other physicochemical characteristics correspond to those laid down for this category. In no case shall this blend be called olive oil

4 Requirements

4.1 General requirements

Edible olive oil and edible olive pomace oil shall;

- be fit for human consumption;
- be free from foreign and rancid odour and taste;
- have colour characteristic of designated product;
- be clear and free from adulterants, sediments, suspended or foreign matter and separated water; and
- be free from admixture with mineral or other oils of vegetable or animal origin when tested in accordance with the methods prescribed in TZS 1322

4.2 Specific requirements

4.2.1 Edible olive oil and edible olive pomace oil shall comply with the specific requirements given in Table 1, when tested in accordance with the test methods specified therein.

Table 1 — Specific requirements for Edible olive oil and edible olive pomace oil

S/No	Characteristic	Requirements						Test method
		Olive pomace oil composed of refined olive pomace oil and virgin olive oils	Refined olive pomace oil	Extra Virgin	Virgin olive oil	Refined olive oil	Olive oil composed of refined olive oils and virgin olive oils	
i.	Refractive index (ND 20 °C)	1.4680-1.4707		1.4677-1.4705				TZS 1329
ii.	Relative density at 20 °C/Water 20 °C	0.910 - 0.916						TZS 1328
iii.	Saponification value, mg KOH/g	182-193		184-196				TZS 1325
iv.	Iodine value (Wijs), g/100	75-92		75-94				TZS 1327
v.	Unsaponifiable matter, g/kg, max.	30		15				TZS 1332
vi.	Moisture and volatile matter at 105 °C, % m/m, max.	0.1		0.2	0.2	0.1	0.1	TZS 1326
vii.	Insoluble impurities, % m/m, max.	0.05		0.1	0.1	0.05		TZS 1336
viii.	Peroxide value, mEq oxygen/kg, max.	15	5	20	20	5	15	TZS 1324
ix.	Free fatty acid as (oleic acid), % m/m, max.	1.0	0.3	0.8	2.0	0.3	1.0	TZS 1331
x.	Erythrodiol and uvaol (% total sterols).	> 4.5		≤ 4.5				TZS 1371

xi.	Wax content, mg/kg	> 350		≤ 150		≤ 350		TZS 1372
xii.	Absorbency in UV at 270 nm, max.	1.70	2.00	0.22	0.25	1.25	1.15	TZS 1368
xiii.	Soap content, % m/m, max.	0.005						TZS 1322
xiv.	Stigmastadiene content, mg/kg, max.	Not applicable	Not applicable	0.05		Not applicable	Not applicable	TZS 2622-2
xv.	Difference between actual and theoretical ECN 42 Triglyceride content, max.	0.50		0.20		0.30		TZS 2446
xvi.	Iron,(Fe) mg/kg, max.	3.0						TZS 1335
xvii.	Copper (Cu), mg/kg, max.	0.1						TZS 1335
xviii.	Fatty acid composition	As shown in Annex A						TZS 288 1 & 2

5 Food additives

5.1 Edible olive oil and edible olive pomace oil may contain permitted food additives in accordance with CXS 192.

5.2 Food additives shall not be used in extra virgin or virgin olive oils.

6 Fortification

Edible olive oil and edible olive pomace oil may be fortified in accordance with TZS 1313.

7 Hygiene

6.1 Edible olive oil and edible olive pomace oil shall be produced, processed, and handled in hygienic manner in accordance with TZS 109.

7 Contaminants

7.1 Heavy metal

Edible olive oil and edible olive pomace oil shall not exceed the limits for heavy metal when tested in accordance with CXS 193.

7.2 Pesticide residues

Edible olive oil and edible olive pomace oil shall comply with those maximum residue limits as established by Codex Alimentarius Commission online database.

8 Sampling and test methods

8.1 Sampling

Edible olive oil and edible olive pomace oil shall be sampled in accordance with TZS 54.

8.2 Test methods

Testing shall be done as provided in the respective Tables and Annex of this Tanzania Standard.

9 Packaging, marking and labelling

9.1 Edible olive oil and edible olive pomace oil shall be packaged in containers made from food grade packaging material and sealed in a manner that will safeguard the hygienic, safety, nutritional and organoleptic properties of the product.

9.2 Edible olive oil and edible olive pomace oil shall be marked and labelled in accordance with TZS 538. In addition, each container of edible olive oil and edible olive pomace oil shall be legibly and indelibly marked with the following information:

- a) name of the product as either (Olive pomace oil composed of refined olive pomace oil and virgin olive oils, refined olive pomace oil, Extra Virgin olive oil, Virgin olive oil, refined olive oil or Olive oil composed of refined olive oils and virgin olive oils); In no case shall the designation "olive oil" be used to refer to olive-pomace oil
- b) trade name or brand, if any;
- c) physical and postal address of the manufacturer and/or packer;
- d) date of manufacture;
- e) expiry date;
- f) a complete list of ingredients in descending order of proportion;
- g) net content in metric units;
- h) batch number;
- i) country of origin; and
- j) storage conditions

9.3 The language on the label shall be "Kiswahili" or "Kiswahili and English". Any other language may be used depending on the designated market.

9.6 The containers shall also be marked with the TBS Standards Mark of Quality.

NOTE – The TBS Standards Mark of Quality may be used by the manufacturers only under licence from TBS. Particulars of conditions under which the licences are granted may be obtained from TBS.

Annex A
(normative)

Fatty acid composition

Fatty acid	Extra virgin and Virgin olive oils	Olive oil composed of refined olive oil and virgin olive oils Refined olive oil	Olive-pomace oil composed of refined olive pomace oil and virgin olive oils Refined olive-pomace oil
C14:0	≤ 0.03	≤ 0.03	≤ 0.03
C16:0	7.0 – 20.0	7.50– 20.0	7.0 – 20.0
C16:1	0.3 – 3.5	0.3 – 3.5	0.3 – 3.5
C17:0	≤ 0.4	≤ 0.4	≤ 0.4
C17:1	≤ 0.6	≤ 0.6	≤ 0.6
C18:0	0.5 – 5.0	0.5 – 5.0	0.5 – 5.0
C18:1	53.0 – 85.0	53.0 – 85.0	53.0 – 85.0
C18:2	2.5 – 21.0	2.5 – 21.0	2.5 - 21.0
C18:3	≤ 1.0 ^a	≤ 1.0 ^a	≤ 1.0 ^a
C20:0	≤ 0.6	≤ 0.6	≤ 0.6
C20:1	≤ 0.5	≤ 0.5	≤ 0.5
C22:0	≤ 0.2	≤ 0.2	≤ 0.2
C24:0	≤ 0.2	≤ 0.2	≤ 0.2
Trans fatty acids			
Σ(t-C18:1)	≤0.05	≤ 0.20	≤ 0.40
Σ(t-C18:2) + Σ(t-C18:3)	≤ 0.05	≤ 0.30	≤ 0.35
Note: ^a In cases where an edible virgin olive oil exhibits $1.0 < \text{linolenic acid \%} \leq 1.4$, then this oil is authentic provided that apparent β -sitosterol/campesterol ≥ 24 and all other composition factors lie within the official limits.			

Bibliography

CXS 33-1981(Revised 2024) *standard for olive oils and olive-pomace oils* published by the Codex Alimentarius Commission