

DRAFT UGANDA STANDARD

First Edition
2016-mm-dd

Edible fats and oils (General) — Specification

PUBLIC REVIEW DRAFT



Reference number
DUS DEAS 321: 2016

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

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National foreword

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- (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.

This Draft Uganda Standard, DUS DEAS 321: 2016, *Edible fats and oils (General) — Specification*, is identical with and has been reproduced from a Draft East African Standard, DEAS 321: 2016, *Edible fats and oils (General) — Specification*, and is being proposed for adoption as a Uganda Standard.

This standard was developed by the Food and agriculture Standards Technical Committee (UNBS/TC 2).

Wherever the words, "East African Standard" appear, they should be replaced by "Uganda Standard."



FDEAS 321:2016

ICS 67.200

FINAL DRAFT EAST AFRICAN STANDARD

Edible fats and oils (General) — Specification

EAST AFRICAN COMMUNITY

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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.

In order to achieve this objective, the Community established an East African Standards Committee mandated to develop and issue East African Standards.

The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the private sectors and consumer organizations. 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 procedures of the Community.

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.

DEAS 321 was prepared by Technical Committee EASC/ TC/015, *Oil Seeds, Edible Fats and Oils*.

This second edition cancels and replaces the first edition (EAS 321; 2000), which has been technically revised

Edible fats and oils (General) — Specification

1 Scope

This Final Draft East Africa Standard specifies the requirements, methods of sampling and tests for edible fats and oils intended for human consumption. It does not apply to any fat or oil, which is a subject of specific East African Standard designated by specific name.

2 Normative references

The following referenced documents are indispensable for the application 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.

EAS 38, *Labelling of pre-packaged foods — Specification*

EAS 39, *Code of practice for hygiene for food and drink industries*

ISO 2590, *General method for the determination of arsenic — Silver diethyldithiocarbamate photometric method*,

EAS 103, *Schedule for permitted food additives*

EAS 291, *Animal and vegetable fats and oils — Sampling*

EAS 305, *Animal and vegetable fats and oils — Sample preparation*

EAS 308, *Animal and vegetable fats and oils — Determination of unsaponifiable matter*

EAS 309, *Animal and vegetable fats and oils — Determination of iodine value*

EAS 310, *Animal and vegetable fats and oils — Determination of refractive index*

EAS 313, *Animal and vegetable fats and oils — Determination of saponification value*

EAS 303, *Animal and vegetable fats and oils — Determination of solid fat content — Pulsed nuclear magnetic resonance method*

EAS 319, *Animal and vegetable fats and oils — Determination of melting point in open capillary tubes (slip point)*

ISO 660, *Animal and vegetable fats and oils — Determination of acid value and acidity*

ISO 661, *Animal and vegetable fats and oils — Preparation of test sample*

ISO 662, *Animal and vegetable fats and oils — Determination of moisture and volatile matter content*

ISO 663, *Animal and vegetable fats and oils — Determination of insoluble impurities content*

ISO 8294, Animal and vegetable fats and oils — Determination of copper, iron and nickel contents -- Graphite furnace atomic absorption method

ISO 12193, Animal and vegetable fats and oils — Determination of lead by direct graphite furnace atomic absorption spectroscopy

ISO 15305, Animal and vegetable fats and oils — Determination of Lovibond colour

3 Terms and definitions

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

3.1 fats and oils
food stuffs which are composed of glycerides of fatty acids of vegetable, animal or marine origin. They may contain small amounts of other lipids such as phosphatides, unsaponifiable constituents and free fatty acids naturally present in the fat or oil

3.2 compounded fats and oils
a blend or mixture of two or more fats and/or oils of plant and/or animal of good health at the time of harvesting or slaughter and fit for human consumption

3.3 virgin fats and oils
edible oil obtained without altering the nature of oil by mechanical procedures for example expelling or pressing , and the application of heat only. It may have been purified by washing with water, settling, filtering and centrifuging only ,

3.4 non –virgin (refined) fats and oils
fts and oils obtained by mechanical procedures and/or solvent extraction and subjected to refining processes to adopt it specially for use in food products.

3.5 edible fats and oils
food stuffs which are composed of glycerides of fatty acids of vegetable, animal or marine origin complying with the provisions of this standard. They may contain small amounts of other lipids such as phosphatides, unsaponifiable constituents and free fatty acids naturally present in the in the fat or oil.

3.6 edible vegetable fat
are foodstuffs which are composed primarily of glycerides of fatty acids being obtained only from vegetable sources. They may contain small amounts of other lipids such as phosphatides, unsaponifiable constituents and of free fatty acids naturally present in the oil

4 Quality requirements and essential composition

4.1 Organoleptic characteristics

Edible fats and oils shall be free from foreign and/or rancid odour and/or taste. The colour of the product shall be characteristic of designated product.

4.2 Fortification

Edible fats and oil shall be fortified in accordance to EAS 769.

4.3 Chemical and physical characteristics

Edible fats and oils shall have the physical and chemical characteristics as in table 1:

Table 1 — Physical and chemical characteristics of edible fats and oils.

Sl. No.	Characteristics	Requirement	Test Method
i)	Fat content, % by mass, min.	99.5	ISO 17189
ii)	Acid value, mg KOH/g, max.	Non virgin 0.6 Virgin 4	ISO 660
iii)	Peroxide value, meq. Peroxide oxygen/kg, max.	Non virgin 10 Virgin 15	ISO 3960

5 Food additives

Edible Fats and oils may contain the following food additives in accordance with Codex Stan 192.

6 Contaminants

6.1 The level of contaminants in edible fats and oils shall comply with the limits specified in Table 2.

Table 2 — Limits for contaminants in edible fat and oils

Sl. No.	Contaminants	Maximum level	Test method
i)	Moisture and matter volatile at 105 °C, % m/m	0.2	ISO 662
ii)	Insoluble impurities, % m/m	0.05	ISO 663
iii)	Soap content, % m/m	0.005	ISO 10539
iv)	Iron, mg/kg	Virgin 5 Non virgin 2.5 Cold pressed 5	ISO 8294
v)	Copper, mg/kg	Virgin 0.4 Non virgin 0.1 Cold pressed 0.4	ISO 8294
vi)	Lead, mg/kg	0.1	ISO 12193
vii)	Arsenic, mg/kg	0.1	ISO 2590
viii)	Nickel, mg/kg	0.1	ISO 8294

6.2 Pesticide residues

The maximum levels of pesticide residues in edible fats and oil shall comply with the levels recommended by Codex Alimentarius Commission

7 Hygiene

Edible fats and oils shall be produced, processed, handled and stored in accordance with EAS 39.

8 Packaging and labelling

8.1 Packaging

Edible fats and oils shall be packaged in food grade containers of material protecting the product from spoilage or contamination without adversely affecting the physical chemical and sensory quality of the product.

8.2 Labelling

Labelling of the product shall be done in accordance with EAS 38.

9 Sampling

Sampling shall be done in accordance with ISO 5555 and samples prepared for testing according to ISO 661.

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