DRAFT KENYA STANDARD

DKS 2998:2024

ICS 67.200.20

First Edition

Named nut or oilseed butters — Specification

Kenya Bureau of Standards

Standards for Quality life

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The following organizations were represented on the Technical Committee:

University of Nairobi
Egerton University
Kapa Oil Refineries Ltd.
Bidco Africa Ltd.
Kenya Medical Research Institute (KEMRI)
Kenya Industrial Research and Development Institute (KIRDI)
Government Chemists Department
Agriculture and Food Authority (AFA) — Nuts and Oil Crops Directorate (NOCD)
Kakuzi PLC Limited
Kenyatta National Hospital (KNH)
Upfield Kenya Limited
Fairoils EPZ Limited

Kenya Bureau of Standards — Secretariat

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REVISION OF KENYA STANDARDS

In order to keep abreast of progress in industry, Kenya Standards shall be regularly reviewed. Suggestions for improvements to published standards, addressed to the Managing Director, Kenya Bureau of Standards, are welcome.

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Foreword

This Kenya Standard was prepared by the Edible fats and oils Technical Committee under the guidance of the Standards Projects Committee, and it is in accordance with the procedures of the Kenya Bureau of Standards.

Value addition in the oilseeds and nuts value chain has led to innovations in production of butter from nuts or oilseeds other than the commonly used peanut and cashew nuts. This standard was thus developed to cover butters obtained to these other nuts or oilseeds which may include but not limited to macadamia butter, almond butter, hazelnut butter, walnut butter. sesame seed butter, pistachio butter and coconut butter. This standard addresses the quality and safety requirements necessary to produce a safe product for human consumption.

During the preparation of this standard, reference was made to the following documents

KS EAS 60, Peanut butter – Specification

KS EAS 1003, Cashew butter – Specification

Acknowledgement is hereby made or the assistance derived from thesesources

I

Named nut or oilseed butters — Specification

1 Scope

This draft Kenya standard specifies requirements, sampling and test methods for nut or oilseed butters intended for human consumption.

This draft Kenya standard does not apply to peanut and cashew butter.

2 Normative references

The following referenced documents 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.

CXG 66, Guidelines for the Use of Flavourings

CXS 192, General Standard for Food Additives

KS EAS 35, Fortified edible salt — Specification

KS EAS 36, Honey — Specification

KS EAS 38, Labelling of prepackaged foods — Specification

KS EAS 39, Hygiene in the food and drink manufacturing industry — Code of Practice

KS EAS 803, Nutrition Labelling — Requirements

KS EAS 804, Claims — General requirements

KS EAS 805, Use of Nutrition and health claims — Requirements

KS ISO 662, Animal and Vegetable fats and oils — Determination of moisture and volatile matter content

KS ISO 729, Oilseeds — Determination of acidity of oils

KS ISO 735, Oilseed residues — Determination of ash insoluble in hydrochloric acid

KS ISO 5555, Animal and vegetable fats and oils — Sampling

KS ISO 6579-1, Microbiology of the food chain — Horizontal method for the detection, enumeration and serotyping of Salmonella — Part 1: Detection of Salmonella spp.

KS ISO 6888-1, Microbiology of the food chain — Horizontal method for the enumeration of coagulase-positive Staphylococci (Staphylococcus aureus and other species) — Part 1: Method using Baird-Parker agar medium

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

KS ISO 13547 -2, Copper, lead, zinc and nickel sulfide concentrates — Determination of arsenic Part 2: Acid digestion and by inductively coupled plasma atomic emission and spectrometric method

KS ISO 16050, Foodstuffs — Determination of aflatoxin B1, and the total content of aflatoxins B1, B2, G1 and G2 in cereals, nuts and derived products — High-performance liquid chromatographic method

KS ISO16649-2, Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of beta-glucuronidase-positive Escherichia coli — Part 2: Colony-count technique at 44 degrees C using 5-bromo-4-chloro-3-indolyl beta-D-glucuronide

KS ISO 21527-2, Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of yeasts and moulds — Part 2: Colony count technique in products with water activity less than or equal to 0.95

3 Terms and definitions

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

3.1

nut or oilseed butters

cohesive, comminuted food product prepared from clean, sound shelled nuts or oilseeds by grinding roasted/fried mature kernels or oilseeds. This may apply but not limited to: macadamia butter, almond butter, hazelnut butter, walnut butter. sesame seed butter, pistachio butter and coconut butter

3.2

foreign matter

any undesirable material visible with naked eye in a packaged nut or oilseed butter

3.3

food grade packaging material

packaging material, made of substances which are safe and suitable for the intended use and which will not impart any toxic substance or undesirable odour or flavour to the product.

4 Requirements

4.1 Ingredients

4.1.1 Essential ingredients

4.1.1.1 Named nut or oilseed butters shall comprise at least 90 % of the specific nut or oilseed from which it is derived from.

4.1.1.2 Nuts or oilseeds used shall comply with the relevant Kenya standards.

4.1.2 Optional ingredients

In addition to the essential ingredients, optional food grade ingredients may be used. These may include but not limited to:

a) edible salt (sodium chloride) complying with KS EAS 35;

b) sugars complying with relevant Kenya sugar standards;

c) honey complying with KS EAS 36; and.

d) edible oils or fats complying with relevant Kenya standards

4.2 General requirements

Nut or oilseed butters shall:

a) be free from shells;

b) be free from any foreign matter; and

c) have an aroma and flavour typical of roasted/fried nut or oilseed.

4.3 Specific requirements

Nut or oilseed butters 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 nut or oilseed butters

S/No.	Characteristic	Requirement	Test method
i)	Moisture and volatile matter content, % max	3.0	KS ISO 662
ii)	Acid value, mg KOH/g max	4.0	KS ISO 729
iii)	Acid insoluble ash, % m/m max	1	KS ISO 735

5 Food additives

Food additives when used in nut or oilseed butters shall comply with CXS 192

6 Flavouring agents

Flavouring agents when used in nut or oilseed butters shall comply with CXG 66.

7 Contaminants

7.1 Aflatoxin

Aflatoxin levels in nut or oilseed butters shall not exceed the limits given in Table 2 when tested in accordance with the test method specified therein.

Table 2 — Aflatoxin limits for nut or oilseed butters

S/No.	Characteristic	Maximum limit µg/kg	Test method
i)	Total aflatoxin	10	KS ISO 16050

ii)	Aflatoxin B1	5	

7.2 Pesticide residues

Nut or oilseed butters shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

7.3 Heavy metal contaminants

Nut or oilseed butters shall comply with the maximum limits of heavy metals as specified in Table 2 when tested in accordance with the test methods therein.

Table 3 — Heavy metal contaminants limits in nut or oilseed butters

S/N	Contaminant (mg/kg)	Max. limit	Test method
i)	Lead (Pb)	0.08	KS ISO 12193
ii)	Arsenic (As	0.1	KS ISO 13547 -2

8 Hygiene

8.1 Nut or oilseed butters shall be produced, prepared and handled in accordance with KS EAS 39.

8.2 Nut or oilseed butters shall comply with the microbiological requirements given in Table 4 when tested in accordance with the test methods specified therein4

Table 4 — Microbiological requirement for nut or oilseed butters

S/No.	Characteristic	Requirement	Test method
i)	Escherichia coli, CFU/g	Absent	KS ISO 16649-2
ii)	Salmonella spp. in 25 g	Absent	KS ISO 6579-1
ii)	Staphylococcus aureus, CFU/g	Absent	KS ISO 6888-1
iv)	Yeast and moulds	10^3	KS ISO 21527-2

9 Packaging

Nut or oilseed butters shall be packaged in food grade packaging material that will safeguard the hygienic, nutritional, technological and organoleptic qualities of the product.

10 Labelling

10.1 In addition to the requirements given in KS EAS 38, the name of the product shall be legibly and indelibly labelled as “XXX Nut butter or XXX oilseed butter” where XXX stands for the nut or oilseed from which the butter is obtained from

11 Nutritional and health claims

Named nut or oilseed butter may have claims on nutrition and health. Such claims when declared shall comply with KS EAS 803, KS EAS 804 and KS EAS 805

12 Sampling

Sampling shall be done in accordance with KS 1SO 5555.

