



DRAFT EAST AFRICAN STANDARD

Chili oil — Specification



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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.

The Community has established an East African Standards Committee (EASC) mandated to develop and issue East African Standards (EAS). The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the public and private sector organizations in the community.

East African Standards are developed through Technical Committees that are representative of key stakeholders including government, academia, consumer groups, private sector and other interested parties. 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 principles and procedures for development of East African Standards.

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.

The committee responsible for this document is Technical Committee EASC/TC 006, *Spices, condiments and culinary herbs*

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Draft for Comments Only

Chili oil – Specification

1 Scope

This Draft East African Standard specifies requirements, sampling and test methods for chili oil intended for human consumption.

2 Normative references

The following referenced documents are indispensable for the application of this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies :-

ISO 948, *Spices and condiments- Sampling*

EAS 38, *Labelling of pre- packaged foods — General requirements*

EAS 39, *General principles for food hygiene*

ISO 4833-1, *Microbiology of the food chain - Horizontal method for the enumeration of microorganisms - Part 1: Colony count at 30 °C by the pour plate technique*

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

ISO 16649 (Part 2), *Microbiology of the food chain — Horizontal method for the enumeration of beta-glucuronidase-positive Escherichia coli — Part 1: Colony-count technique at 44 degrees C using membranes and 5-bromo-4-chloro-3-indolyl beta-D-glucuronide*

ISO 6633, *Fruits ,vegetables and derived products — Determination of lead content — Flameless atomic absorption Spectrometric Method*

ISO 6634, *Fruits, Vegetables and derived products — Determination of arsenic content — Silver diethyldithiocarbamate spectrophotometric method*

ISO 6571, *Spice, condiments and herbs - Determination of volatile oil content (hydrodistillation method)*

ISO 3960, *Animal and vegetable fats and oils — Determination of peroxide value — Iodometric (visual) endpoint determination*

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*

ISO 21527-1, *Microbiology of food and animal feeding stuffs - Horizontal method for the enumeration of yeasts and moulds - Part 1: Colony count technique in products with water activity greater than 0.95*

ISO 3513, *Chilies — Determination of Scoville index*

CXS 192, *General Standard for Food Additives*

3. Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1 chili oil

condiment made from vegetable oil/seed oil that has been infused with chili peppers and spices

3.2 fresh chilies

fresh, mature and clean chilies of Capsicum and/or preserved chilies

3.3 scoville index

measurement of the pungency (spiciness or "heat") of chilli peppers and other spicy foods

4 Requirements

4.1 General requirements

4.1.1 Ingredients

4.1.1.1 Main ingredients

Chili oil shall be a product prepared from fresh chilies, a mixture of chili paste or chili solids derived from clean, sound and wholesome ripened chilies and cooking oil complying with standards for the named vegetable oil/seed oil.

4.1.1.2 Optional Ingredients

Chili oil may contain extracts of fruits, garlic, ginger, onion and other spices, salt and sugar.

4.1.1.2.1 Colour

Chili oil shall have the characteristic colour of ingredients used.

4.1.1.2.2 Taste and odour

Chili oil shall be free from objectionable flavour, odours or off-flavour of any kind.

4.1.1.2.3 Appearance

Chill oil shall be clear without any precipitate/suspended particles.

4.2 Specific requirements

Chili oil shall comply with the requirements specified in Table 1, when tested in accordance with methods specified therein.”.

Table 1: Specific requirements for chili oil

S/No	Characteristic	Limits	Method of test
1	Acid value (KOH) (mg/g), max.	4.0	ISO 660
2	pH, max.	4.6	ISO 1842
3	Scoville index, Scoville Heat Unit	600 – 13 000	ISO 3513
4	Volatile oil, %, max.	2	ISO 6571
5	Peroxide value, milliequivalents of peroxide oxygen/kg, max.	10	ISO 3960

5. Food additives

The use of food additives in chili oil shall be in accordance with CXS 192.

6. Hygiene

6.1 Chili oil shall be produced and handled in accordance with EAS 39.

6.2 Chili oil shall comply with the microbiological limits given in Table 2 when tested in accordance with the test methods specified therein.

Table 2: Microbiological requirement for chili oil

S/No	characteristic	Maximum limit	Test method
1	Total Plate Count, cfu/g	10 ⁴	ISO 4833-1
2	<i>E. coli</i> , cfu/g	Absent	ISO 16649-2
3	Yeast and moulds cfu/g,	10 ²	ISO 21527-2
4	<i>Salmonella spp.</i> in 25 g	Absent	ISO 6579-1
5	<i>Staphylococcus aureus</i> , cfu/g	10 ²	ISO 6888-1
6	<i>Clostridium botulinum</i> , cfu/g	Absent	ISO 17919

7 Contaminants

7.1 Heavy metals

Chilli oil shall comply with the heavy metals limits given in Table 3 when tested in accordance with the test methods specified therein

Table 3: Limits for heavy metal in chili oil

S/No	Characteristic	Maximum limit (mg/kg)	Method of test
1	Arsenic	0.1	ISO 6634
2	Lead	0.08	ISO 6633

7.2 Pesticides Residues

Chili oil shall comply with those maximum pesticide residue limits established by the Codex Committee on Pesticide Residues for this commodity.

8 Packaging

The chili oil shall be packaged in food grade packaging material that secures the integrity and the safety of the product.

9. Labelling

In addition to the requirements of EAS 38, EAS 803 and EAS 804, each container shall be legibly and indelibly labelled with the following information:

- a) name of the product, 'chili oil'
- b) Trade name or brand name, if any
- c) List of ingredients in descending order
- d) Name and address of the manufacturer and/or packer.
- e) Batch or lot number
- f) Date of packing/manufacturing
- g) Net weight
- h) Country of origin
- i) Expiry date
- j) Storage conditions
- k) Instruction for use
- l) Allergens, if presents

10. Sampling

Sampling for chili oil shall be done in accordance with ISO 948.