

CODEX ALIMENTARIUS

INTERNATIONAL FOOD STANDARDS



Food and Agriculture
Organization of
the United Nations



World Health
Organization

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REGIONAL STANDARD FOR MIXED ZAATAR

(Near East)¹

CXS 341R-2020

Adopted in 2020.

¹ Members of the Codex Alimentarius Commission in the region of Near East are indicated on the Codex website at <https://www.fao.org/fao-who-codexalimentarius>.

1. SCOPE

This Standard determines the requirements and characteristics that shall be present in mixed zaatar intended for direct human consumption.

2. DESCRIPTION

2.1 Definition

2.1.1 *Mixed Zaatar*

It is a mix consisting of dried raw zaatar and dried raw broadleaf zaatar, as defined below, and the husk of sumac, and sesame seeds, to which other ingredients may be added. The classification of mixed zaatar shall be as shown in Section 2.2.

2.1.2 *Dried Raw Zaatar*

It is composed of the leaves and/or blossoms of the following wild and cultivated plants, which are dried and then manually or mechanically crumbled but not powdered.

- *Origanum* spp.
- *Thymbra* spp.
- *Thymus* spp.
- *Satureja* spp.

2.1.3 *Dried Raw Broadleaf Zaatar*

It is composed of the leaves and/or blossoms of the wild or cultivated broadleaf zaatar, namely *Origanum syriacum* (at least 75%) or constitutes a mix (25% maximum) of the leaves and blossoms of the following varieties, which are dried and then manually or mechanically crumbled but not powdered.

- *Origanum ehrenbergii*
- *Thymbra spicata*
- *Coridothymus capitatus*
- *Thymus syriacus*
- *Satureia thymbra*

2.2 Classification

Mixed zaatar is classified as follows:

2.2.1 "Grade 1" Mixed Zaatar

It shall consist of at least 40% raw broadleaf zaatar mixed exclusively with sesame seeds and sumac husk, with the possibility of adding salt to a maximum level of 4%.

2.2.2 "Grade 2" Mixed Zaatar

It shall consist of at least 30% raw zaatar or raw broadleaf zaatar mixed with sesame seeds and sumac husk, with the possibility of adding grains, nuts, spices and condiments, as well as salt to a maximum level of 4%.

2.2.3 "Grade 3" Mixed Zaatar

It shall consist of at least 15% raw broadleaf zaatar or raw zaatar mixed with sesame seeds and sumac husk which should be added to a level of at least 5%, with the possibility of adding salt to a maximum level of 4% and citric acid according to Good Manufacturing Practices (GMP). Optional ingredients as listed in Section 3.1.2 may be added provided they all meet GMP.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Composition

3.1.1 *Main ingredients for mixed zaatar*

Dried raw zaatar as defined in Section 2.1.2, dried raw broadleaf zaatar, as defined in Section 2.1.3, the husk of sumac, and sesame seeds.

3.1.2 Optional ingredients for Grade 3 mixed zaatar only

- Legumes
- Grains
- Culinary herbs
- Spices and condiments (e.g. cumin)
- Pomegranate molasses
- Vegetable oil
- Nuts
- Wheat bran

3.2 Quality Factors

3.2.1 General Requirements

The following characteristics shall be observed in mixed zaatar:

- All the ingredients used in the preparation of the mixed zaatar shall be in conformity with their corresponding Codex Alimentarius standards.
- The final product shall not be in a powder form in order to ensure its main ingredients are recognizable by microscopic inspection (leaves, blossoms, straws, etc.) or visible to the naked eye, to avoid fraud and concealing of impurities therein, and to ensure that higher levels of volatile oils are maintained.
- The product must have a special flavour and smell and be free of any extraneous odours and flavours, including rancidity and mouldiness, as well as of any extraneous substances.
- The product should be stored in a cool and dry place.

3.2.2 Physical and Chemical Characteristics of Mixed Zaatar

3.2.2.1 Physical requirements

Mixed zaatar shall be free of living insects and spiders, any visible mouldiness, dead insects and parts thereof, contamination by rodents, birds and snails waste¹. In addition, mixed zaatar shall comply with the physical requirements specified in Table 1.

Table 1: Physical Requirements for mixed zaatar

Parameter	Requirement
Extraneous vegetable matter ¹ , maximum % mass fraction	2.0
Foreign matter ² content, maximum % mass fraction	1.0

¹ Vegetative matter associated with the plant from which the product originates - but is not accepted as part of the final product.

² Any visible objectionable foreign detectable matter or material not usually associated with the natural components of the product; such as sticks, stones, burlap bagging, metal etc.

3.2.2.2 Chemical Requirements

Table 2: Chemical Requirements for mixed zaatar

Parameter	Requirement		
	Grade 1	Grade 2	Grade 3
Moisture, % mass fraction (dry basis), maximum	12.0	12.0	12.0
Total table salt, % mass fraction (dry basis), maximum	4.0	4.0	4.0
Acid-insoluble ash, % mass fraction (dry basis), maximum	1.0	1.0	1.0

¹ Magnifications might be used for detection in some cases and the magnifying power used should be indicated in the test results report.

4. FOOD ADDITIVES

No food additives are permitted in Grade 1 and Grade 2 mixed zaatar. Only the following food additive is permitted in Grade 3 mixed zaatar (Table 3).

Table 3: Food additives in Grade 3 mixed zaatar

INS No.	Name of Additive	Maximum Level
Acidity Regulators		
330	Citric acid	GMP

5. CONTAMINANTS

- 5.1** The products covered by this Standard shall comply with the maximum levels of the *General Standard for Contaminants and Toxins in Food and Feed* (CXS 193-1995).
- 5.2** The products covered by this Standard shall comply with the maximum residue limits for pesticides established by the Codex Alimentarius Commission.

6. HYGIENE

- 6.1** It is recommended that the products covered by this Standard be prepared and handled in accordance with the appropriate sections of the *General Principles of Food Hygiene* (CXC 1-1969) and other relevant Codex texts such as the *Code of Hygienic Practice for Low-Moisture Foods* (CXC 75-2015).
- 6.2** The products should comply with any microbiological criteria established in accordance with the *Principles and Guidelines for the Establishment and Application of Microbiological Criteria Related to Foods* (CXG 21-1997).

7. LABELLING

The products covered by this Standard shall be labelled in accordance with the *General Standard for the Labelling of Prepackaged Foods* (CXS 1-1985). Any health claims shall be in conformity with the *Guidelines for Use of Nutrition and Health Claims* (CXG 23-1997), when necessary. In addition, the following specific provisions apply:

7.1 Name of Product

- 7.1.1** The name of the product shall be "mixed zaatar".
- 7.1.2** The classification shall be indicated according to Section 2.2 next to the product name.

7.2 Labelling of Non-Retail Packages

Information for non-retail containers shall be given either on the container or in accompanying documents, except that the name of the product, lot identification, and the name and address of the manufacturer, packer, distributor or importer, as well as storage instructions, shall appear on the container. However, lot identification, and the name and address of the manufacturer, packer, distributor or importer may be replaced by an identification mark, provided that such a mark is clearly identifiable with the accompanying documents.

8. METHODS OF ANALYSIS AND SAMPLING²

For checking the compliance with this Standard, the methods of analysis and sampling contained in the *Recommended Methods of Analysis and Sampling* (CXS 234-1999) relevant to the provisions in this Standard, shall be used.

Table 4: Methods of analysis for mixed zaatar

Provision	Method	Principle	Type*
Sodium chloride	AOAC 960.29	Titrimetry (Mohr: determination of chloride, expressed as sodium chloride)	
Moisture	AOAC 925.10	Gravimetry, drying at 130°C	
Acid-insoluble ash	AOAC 941.12	Gravimetry, Furnace, 550°C (for the HCl insoluble ignited residue)	
Extraneous Matter	ISO 927	Visual Examination, followed by Volumetry	I
Foreign Matter	ISO 927	Visual Examination, followed by Volumetry	I
Insects/Excreta/Insect Fragments	Method appropriate for particular spice from AOAC Chapter 16, subchapter 14 [ISPM 08 Determination of Pest Status in an area]	Visual Examination	IV
Mould damage	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual, FDA, Technical Bulletin Number 5)	Visual examination (for whole)	IV
Excreta Mammalian,	Macroanalytical Procedure Manual, USFDA, Technical Bulletin V.39 B (For whole)	Visual Examination	IV
Excreta Other	AOAC 993.27 (For Ground)	Enzymatic Detection Method	IV

* According to the Procedural Manual of the Codex Alimentarius Commission, Section II: Elaboration of Codex texts – Principles for the establishment of Codex methods of analysis.

² The listing of methods of analysis and sampling will be removed when the standard is adopted by CAC and included in CXS 234-1999.