

CODEX ALIMENTARIUS

INTERNATIONAL FOOD STANDARDS



Food and Agriculture
Organization of the
United Nations



World Health
Organization

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STANDARD FOR DRIED THYME

CXS 328-2017

Adopted in 2017. Amended in 2021.

1. SCOPE

This Standard applies to dried thyme offered for direct consumption, as an ingredient in food processing or for repackaging if required. It excludes dried thyme intended for industrial processing.

2. DESCRIPTION

2.1 Product Definition

Dried thyme is the product prepared from leaves/ flowers of *Thymus* spp. of Lamiaceae family reached appropriate degree of development for processing; and processed in an appropriate manner, undergoing operations such as cleaning, drying, rubbing, and milling.

2.2 Styles

Dried thyme may be offered in one of the following styles:

- a) Whole / intact.
- b) Crushed/rubbed: processed into varying degrees ranging from a coarse to fine crush.
- c) Ground: processed into powders.

2.3 Varietal Types

All wild species and varieties or cultivars and hybrids belonging to the genus *Thymus*, which are suitable for processing.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Composition

Product as defined in Section 2.

3.2 Quality Factors

3.2.1 Moisture

Moisture content for thyme shall be 12 % maximum.

3.2.2 Odour, flavour and colour

Dried thyme shall have a characteristic odour and flavour according to the chemical components of the volatile oil (such as thymol, carvacrol, and linalool), which can vary depending on geo-climatic factors/conditions. Dried thyme shall be free from any foreign odour or flavour and especially from mustiness. Dried thyme shall have a characteristic colour varying from green ash to brownish grey.

3.2.3 Physical Characteristics

Dried thyme shall comply with the physical requirements specified in Table 1.

Table 1. Physical requirements for dried thyme (allowable tolerances for defects)

Parameter	Requirement
Extraneous vegetable matter ¹ , maximum % mass fraction	0.5
Foreign matter ² content, maximum % mass fraction	0.5
Mould visible, maximum % mass fraction	1.0
Insect damaged leaves/ flowers, maximum % mass fraction	1.0
Dead insects, Insect fragments and rodent contaminant, maximum % mass fraction	1.0
Live insects	0
Mammalian excreta maximum (mg/Kg)	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 spice plant; such as sticks, stones, burlap bagging, metal etc".

3.2.4 Chemical Characteristics

Dried thyme shall comply with the chemical requirements specified in Table 2.

Table 2. Chemical requirements for dried thyme

Parameter	Requirement
Total ash, % mass fraction (dry basis), maximum	12.0
Acid-insoluble ash, % mass fraction (dry basis), Maximum	3.5
Volatile oils, ml/100 g (dry basis), minimum	1.0

3.3 Classification of “Defectives”

A lot sample that fails to meet one or more of the applicable quality requirements, as set out in Section 3.2 (except those based on sample averages), should be considered as a “defective”.

3.4 Lot Acceptance

A lot should be considered as meeting the applicable quality requirements referred to in Section 3.2 when the number of “defectives”, as defined in Section 3.3, does not exceed the acceptance number of the appropriate sampling plan. For factors evaluated on a sample average, a lot will be considered acceptable if the average meets the specified tolerance, and no individual sample is excessively out of tolerance.

4. FOOD ADDITIVES

Anticaking agents listed in Tables 1 and 2 of food category 12.2.1 (Herbs and Spices) of the *General Standard for Food Additives* (CXS 192-1995) are acceptable for use in powdered thyme.

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. FOOD HYGIENE

6.1 It is recommended that the products covered by the provisions of this Standard be prepared and handled in accordance with the appropriate sections of the *General Principles of Food Hygiene* (CXC 1-1969), the *Code of Hygienic Practice for Low Moisture Foods* (CXC 75-2015) *Annex III on Spices and Dried Aromatic Herbs* and other relevant Codex texts such as codes of hygienic practice and codes of practice.

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. WEIGHTS AND MEASURES

Containers shall be as full as practicable without impairment of quality and shall be consistent with a proper declaration of contents for the product.

8. LABELLING

8.1 The products covered by the provisions of this Standard shall be labelled in accordance with the *General Standard for the Labelling of Pre-packaged Foods* (CXS 1-1985). In addition, the following specific provisions apply:

8.2 Name of the Product

8.2.1 The name of the product shall be "dried thyme" or thyme when the omission of the word dry would not mislead or confuse the consumer.

8.2.2 The name of the product may include an indication of the species, varietal types and the style as described in Section 2.2. In case of products consisting of blends of different *Thymus* species, the name of the product may be followed by the *Thymus* species in order of descending quantity.

8.2.3 Country of harvest/origin (optional)

8.2.4 Inspection mark (optional)**8.3 Labelling of Non-Retail Containers**

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.

9. METHODS OF ANALYSIS AND SAMPLING

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.