

DRAFT STANDARD FOR DRIED THYME

1 SCOPE

This Standard applies to dried leaves/ flowers of thyme (*Thymus spp.*) of the *Lamiaceae* family offered for industrial food production as a condiment and for direct human consumption or for repackaging if required. [It does not apply to the product when indicated as being intended for further processing.]

2 DESCRIPTION**2.1 Product Definition**

Dried thyme is the product prepared from leaves/ flowers of *Thymus spp.* processed in an appropriate manner, undergoing operations such as cleaning, drying, rubbing, milling and sifting.

2.2 Styles

Dried thyme leaves/ flowers 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/powdered: 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 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.

3.2.2 Infestation

Dried thyme shall be free from live insects and practically free from dead insects, insect fragments and rodent contamination visible to the naked eye (corrected, if necessary, for abnormal vision).

3.2.3 Physical Characteristics

Dried thyme shall comply with the physical requirements specified in Table 1, excluding ground/powdered style.

Table 1. Physical requirements for dried thyme

Parameter	Requirement
Extraneous vegetable material ¹ , maximum % mass fraction	0.5
Foreign matter ² content, maximum % mass fraction	0.5
Mold visible, maximum %	1.0
Insect damaged leaves/ flowers, maximum % mass fraction	1.0

¹ All vegetable matter from the specific plant other than the required part. The proportion of stalks which have dimensions exceeding 7 mm in length and 2 mm in diameter shall not be more than 5 % (m/m) (w/w) of total extraneous matter content.

² Any visible and/or apparent matter or material not usually associated with the product.

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
Moisture, % mass fraction, maximum	12.0
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

4.1 Only the anticaking agents listed below are permitted for use in ground/powdered thyme.

INS No.	Name of the Food Additive	Maximum Level
460 (i)	Microcrystalline cellulose	GMP
460 (ii)	Powdered cellulose	GMP
551	Silicon dioxide, amorphous	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* (CODEX STAN 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* (CAC/RCP 1-1969), the *Code of Hygienic Practice for Spices and Dried Aromatic Herbs* (CAC/RCP 42-1995) 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 for the Establishment and Application of Microbiological Criteria for Foods* (CAC/GL 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* (CODEX STAN 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".

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.

8.3 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

9.1 Methods of Analysis

Provision	Method	Principle
Moisture	ISO 938:1980 Alternative: AOAC 2001.12 ASTA 2.0	Distillation
Total ash	ISO 928:1997 Alternative: AOAC 950.49 ASTA 3.0	Gravimetry
Acid-insoluble ash	ISO 930:1997 Alternative: ASTA 4.0	Gravimetry
Volatile oils	ISO 6571:2008 Alternative: AOAC 962.17 ASTA 5.0	Distillation
Extraneous vegetable material	ISO 927:2009 Alternative: ASTA 14.1	Visual examination
Foreign matter	ISO 927:2009	Visual examination
Insect damage	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual, FDA Technical Buletin Number 5)	Visual examination
Mold damage	Method V-8 Spices, Condiments, Flavors and Crude Drugs (Macroanalytical Procedure Manual, FDA Technical Bulletin Number 5)	Visual examination

9.2 Sampling Plan

[To be developed]