



JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEx COMMITTEE ON FOOD ADDITIVES

Fifty-Fifth Session

PROPOSED DRAFT STANDARD FOR BAKER'S YEAST

(changes following adoption with CRD22 are presented as **bold-underline** additions and ~~strikethrough~~ deletions)

1. SCOPE

This standard applies to baker's yeast, as defined in Section 2, for direct sale to the consumer and for food manufacture. Baker's yeast is a food ingredient, and used in the manufacturing and production of baked goods.

2. DESCRIPTION

2.1 PRODUCT DEFINITION

2.1.1 Baker's yeast refers to a type of unicellular fungus belonging to the species of *Saccharomyces cerevisiae*. It is produced by the multiplication of pure strains and is used as a biological leavening agent in bakery applications, with the main function of producing carbon dioxide and flavors. It is not a ready-to-eat product. **Yeast derived from modern biotechnology should comply with *Principles for the Risk Analysis of Foods Derived from Modern Biotechnology* (CXG 44-2003) and national regulatory frameworks.**

2.1.2 Fresh yeast is a type of baker's yeast with high moisture content, which is obtained by separation and other processes such as compression.

2.1.3 Dry yeast is a type of baker's yeast, which is obtained by removing water from fresh yeast and then drying to a low water content to maintain a low metabolic activity.

2.2 TYPES

According to product appearance, baker's yeast shall be classified in two types:

2.2.1 FRESH YEAST

Fresh yeast is a milky white to yellowish brown solid or liquid with a smell typical for yeast and may be in three major forms:

- (a) Block yeast or compressed yeast, which shall be in the form of a block. The texture or consistency shall be characterized by high plasticity, permitting kneading and deformation without breakage, or shall be friable, breaking easily into small fragments.
- (b) Granulated yeast or crumbled yeast, which shall be in the form of small granules.
- (c) Liquid yeast or cream yeast, which shall be a liquid suspension of yeast cells in water with a cream-like texture.

2.2.2 DRY YEAST

Dry yeast is an ivory-coloured particle or granule, with a smell typical for yeast. Dry yeast may be classified into ~~two~~ **three** types.

- (a) The active dry yeast is rehydrated to reactivate it in lukewarm water before use. The particles are rod-shaped or spherical in appearance, with a diameter of 0.2 mm - 3 mm.
- (b) The instant yeast or instant active dry yeast is used in a way that can be added directly to the flour during mixing without a rehydration step in water. The product consists of porous cylindrical particles with a diameter of about 0.5 mm and length up to a few millimeters.

- (c) The semi-dry yeast needs to be stored frozen and can be added directly to the flour and other ingredients during mixing. The product consists of porous cylindrical particles with a diameter of about 0.5 mm.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 ESSENTIAL COMPOSITION

For the production of this document, the following composition shall apply.

- (a) Yeast as defined in Section 2.

(b) Other ingredients needed for dough of baked goods may be added to yeast as appropriate.

In accordance with Section 4.2 of the General Standard for Food Additives (CXS 192-1995), referring to the special conditions applying to the use of food additives not directly authorised in food ingredients and raw materials, additional additives may be added to dry yeast products used exclusively in the preparation of bakery wares of food category 07.0 and its sub-categories provided the use of food additives is in conformity with the food additive provisions of the corresponding food category in the General Standard for Food Additives

3.2 QUALITY FACTORS

3.2.1 MOISTURE

The moisture content of fresh yeast and dry yeast has a wide range, depending on the formulation of the product—block yeast, granulated yeast, liquid yeast and the requirements for fermentation performance and consistency/plasticity. It shall comply with the requirements of Table 1.

Table 1

Types	Moisture (% , w/w)
Block yeast /compressed yeast	61-74
Granulated yeast / crumble yeast	60- 75 [60-70]
Liquid yeast / cream yeast	71-86
Active dry yeast/ instant dry yeast	2-10
<u>Semi-dry yeast</u>	<u>15-26</u>

3.2.2 pH

This measurement of the pH value is required primarily for liquid yeast or cream yeast. Typical pH values range from 3 to 7.5.

4. FOOD ADDITIVES

4.1 ~~Antioxidants and emulsifiers~~ Used in accordance with Tables 1 and 2 of the *General Standard for Food Additives* in food category 12.8 (yeast and like products) ~~or and [additives]~~ **[acidity regulators, antioxidants, emulsifiers, humectant, packaging gas, stabilizer]** listed in Table 3 of the GSFA are acceptable for use in foods conforming to this standard.

<u>Additive functional class</u>	<u>Justified use in yeast</u>	
	<u>Fresh yeast</u>	<u>Dry yeast</u>
<u>Acidity regulators</u>	<u>×</u>	
<u>Antioxidants</u>		<u>×</u>
<u>Emulsifiers</u>		<u>×</u>
<u>Humectant</u>		<u>×</u>
<u>Packaging gas</u>		<u>×</u>
<u>Stabilizer</u>	<u>×</u>	<u>×</u>
<u>.....</u>		

4.2 Processing aids used in products for purpose of lubricant, filtering aid and fermentation nutrients conforming to this standard should be consistent with the Guidelines on Substances used as Processing Aids (CXG 75-2010).

5. CONTAMINANTS

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).

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), and other relevant Codex texts such as codes of hygienic practice and codes of practice.
- 6.2** The products shall comply with any microbiological criteria established in accordance with the *Principles and Guidelines for the Establishment and Application of Microbiological Criteria Related for Foods* (CXG 21-1997).

7. LABELLING

In addition to the provisions of the *General Standard for Labeling of Prepackaged Foods* (CXS 1-1985) the following specific provisions shall apply.

7.1 NAME OF THE PRODUCT

The name of the product shall be “Baker’s yeast” or “Yeast” or be labelled with the corresponding name described in Section 2.2.

Other names may be used in accordance with the law and custom of the country in which the product is sold and in such a manner as to not mislead consumers.

7.2 LABELLING OF NON-RETAIL CONTAINERS

The labelling of non-retail containers should be in accordance with the *General Standard for the labelling of non-retail containers of foods* (CXS 346-2021).

8. PACKAGING, TRANSPORTATION AND STORAGE

Packaging shall not be a source of contamination or migration, and must protect the quality of the product during transport and storage. Packaging shall be odorless.

9. METHODS OF ANALYSIS AND SAMPLING¹

Provisions	Commodity	Method	Principle	Type
Moisture	Fresh yeast	AOAC 961.06	Gravimetry	I
Moisture	Dry yeast / <u>semi-dry yeast</u>	AOAC 960.18		I
pH	Liquid yeast / cream yeast	ISO 11289	Electrometry <u>Potentiometry</u>	I

¹ The methods of analysis will be included in CXS 234- 1999 after endorsement by CCMAS and the following text shall replace the Table:

“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”.