

**CODEX STANDARD FOR CANNED GREEN BEANS
AND CANNED WAX BEANS¹**

CODEX STAN 16-1981

1. DESCRIPTION

1.1 Product Definition

Canned beans is the product (a) prepared from succulent pods of the fresh green bean or wax bean plant, conforming to the characteristics of *Phaseolus vulgaris* L. and *Phaseolus coccineus* L. from which strings, if any, and stems have been removed, (b) packed with water or other suitable liquid medium, nutritive sweeteners, seasoning, and other ingredients, appropriate to the product, and (c) processed by heat, in an appropriate manner, before or after being sealed in a container, so as to prevent spoilage.

1.2 Varietal Type

Beans of distinct varietal groups with respect to shape may be designated as:

1.2.1 **Round:** beans having a width not greater than 1½ times the thickness of the bean.

1.2.2 **Flat:** beans having a width greater than 1½ times the thickness of the bean.

1.3 Colour Type

Bean having distinct varietal differences shall be designated either as:

1.3.1 Green; or

1.3.2 Wax, (may be additionally designated "golden" or "yellow").

1.4 Styles

1.4.1 **Whole:** whole pods of any length.

1.4.2 **Shoestring; Sliced Lengthwise; French Style:** pods sliced lengthwise or at an angle of 45° or less to the longitudinal.

1.4.3 **Cuts:** transversely cut pods not less than 20 mm long and may contain shorter end pieces which result from cutting.

1.4.4 **Short Cuts:** pieces of pods cut transversely of which 75 percent, by count, or more are less than 20 mm long.

1.4.5 **Diagonal Cut:** approximately 45° to the longitudinal.

¹ Formerly CAC/RS 16-1969 as amended.

1.4.6 **Other Styles:** any other presentation of the product shall be permitted provided that the product:

- (a) is sufficiently distinctive from other forms of presentation laid down in this standard;
- (b) meets all relevant requirements of this standard, including requirements relating to limitations on defects, drained weight, and any other requirements in this standard which are applicable to that style in the standard which most closely resembles the style or styles intended to be provided for under this provision;
- (c) is adequately described on the label to avoid confusing or misleading the consumer.

1.5 **Designations in Accordance with Size**

If a term designating size is used, it must be supported by an exact graphic representation of the cross section of the bean pod or by a statement of the maximum diameter in millimetres.

1.6 **Tough String**

A tough string is a string that will support the weight of 250 grammes for five seconds or longer.

2. **ESSENTIAL COMPOSITION AND QUALITY FACTORS**

2.1 **Other Ingredients**

2.1.1 **Butter:** if added, it must amount to not less than 3% m/m of the final product.

2.1.2 Salt.

2.1.3 Sucrose, invert sugar, dextrose, glucose syrup, dried glucose syrup.

2.1.4 Dill seeds, or dill flavourings, or similar seasonings, and vinegar; pieces of green or red peppers in mixtures of both and/or tomato not exceeding in total 15% m/m of the product;

2.1.5 *Starches* - natural (native), physically or enzymatically modified - only when butter is an ingredient.

2.2 **Quality Criteria**

2.2.1 Definition

Extraneous plant material: bean leaves and stems and similar plant material.

2.2.2 Colour

Except for artificially coloured canned beans, the drained beans shall have normal colour characteristics for canned green beans or canned wax beans. Canned beans containing permitted ingredients and additives shall be considered to be of characteristic colour when there is no abnormal discolouration for the respective substances used.

2.2.3 Flavour

Canned beans shall have a normal flavour and odour free from flavours or odours foreign to the product and canned beans with special ingredients shall have a flavour characteristic of that imparted by the beans and the other substances used.

2.2.4 Texture

The beans shall not be fibrous and not more than 5% m/m of the units may possess tough strings.

2.2.5 Defects

When tested in accordance with the Joint FAO/WHO Codex Alimentarius Sampling Plans for Prepackaged Foods (AQL-6.5) (Reg. CAC/RM 42-1969) (see Codex Alimentarius Volume 13), canned beans shall be free of defects to the extent indicated below:

2.2.5.1 Sampling unit size

- (a) for extraneous plant material, entire sample;
- (b) for other defects, 340 g of drained beans.

2.2.5.2 Allowances

- (a) Extraneous plant material, not more than 3 pieces per 340 g of drained beans.
- (b) All other defects:

Not more than 8 unstemmed units per 340 g

Not more than 10% m/m of damaged beans of which amount not more than one-half may be materially damaged by insect or pathological injury.

2.2.6 Classification of "Defectives"

A container that fails to meet one or more of the applicable quality requirements as set out in sub-sections 2.2.2 through 2.2.5 (except extraneous plant material which is based on an average of the entire sample) shall be considered a "defective".

2.2.7 Acceptance

A lot will be considered as meeting the applicable quality requirements referred to in sub-section 2.2.6 when:

- (a) for those requirements which are not based on averages - the number of "defectives", as defined in sub-section 2.2.6, does not exceed the acceptance number (c) of the appropriate sampling plan (AQL-6.5) in the Joint FAO/WHO Codex Alimentarius Sampling Plans for Prepackaged Foods (CAC/RM 42-1969), (see Codex Alimentarius Volume 13); and
- (b) the requirement which is based on sample average is complied with.

3. FOOD ADDITIVES

Maximum Level

3.1	Monosodium glutamate	Limited by GMP
3.2	Vegetable gums, as follows:	}
3.2.1	Arabic gum	}
3.2.2	Carrageenan	}
3.2.3	Furcellaran	}
3.2.4	Guar gum	}
3.3	Alginates (Ca, K, Na, NH ₄)	}
3.3.1	Propylene glycol alginate	} ² 10 g/kg of the additives
3.4	Modified starches, as follows:	} specified under 3.2 to 3.4
3.4.1	Acid-treated starches	} inclusive, singly or in
3.4.2	Alkali-treated starches	} combination
3.4.3	Bleached starches	}
3.4.4	Distarch phosphate (sodium trimeta- phosphate treated)	}
3.4.5	Distarch phosphate, phosphated	}
3.4.6	Monostarch phosphate	}
3.4.7	Starch acetate	}
3.4.8	Starch, hydroxypropyl	}
3.4.9	Distarch adipate, acetylated	}
3.4.10	Distarch glycerol, hydroxypropyl	}
3.4.11	Oxidized starches	}
3.5	Colours	

² May be used only when butter is an ingredient.

Tartrazine CI 19 140 100 mg/kg

4. CONTAMINANTS

Lead (Pb) 1 mg/kg
Tin (Sn) 250 mg/kg, calculated as Sn

5. HYGIENE

5.1 It is recommended that the product covered by the provisions of this standard be prepared and handled in accordance with the appropriate sections of the Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 2 (1985) Codex Alimentarius Volume 1), and other Codes of Practice recommended by the Codex Alimentarius Commission which are relevant to this product.

5.2 To the extent possible in Good Manufacturing Practice, the product shall be free from objectionable matter.

5.3 When tested by appropriate methods of sampling and examination, the product:

- shall be free from microorganisms in amounts which may represent a hazard to health;
- shall be free from parasites which may represent a hazard to health; and
- shall not contain any substance originating from microorganisms in amounts which may represent a hazard to health.

5.4 The product shall have received a processing treatment sufficient to destroy all spores of *Clostridium botulinum*.

6. WEIGHTS AND MEASURES

6.1 Fill of Container

6.1.1 Minimum Fill

The container shall be well filled with beans and, except for "Vacuum pack" beans, the product (including packing medium) shall occupy not less than 90% of the water capacity of the container. The water capacity of the container is the volume of distilled water at 20°C which the sealed container will hold when completely filled.

6.1.2 Classification of "Defectives"

A container that fails to meet the requirement for minimum fill (90 percent container capacity) of sub-section 6.1.1 shall be considered a "defective".

6.1.3 Acceptance

A lot will be considered as meeting the requirement of sub-section 6.1.1 when the number of "defectives", as defined in sub-section 6.1.2, does not exceed the acceptance number (c) of the appropriate sampling plan (AQL-6.5) in the Joint FAO/WHO Codex Alimentarius Sampling Plans for Prepackaged Foods (CAC/RM 42-1969), (see Codex Alimentarius Volume 13).

6.1.4 **Minimum Drained Weight**

6.1.4.1 The drained weight of the product shall be not less than 55% of the weight of distilled water at 20° C which the sealed container will hold when completely filled, except for beans in "whole" or "sliced lengthwise" style which shall be not less than 50%.

6.1.4.2 The requirements for minimum drained weight shall be deemed to be complied with when the average drained weight of all containers examined is not less than the minimum required, provided that there is no unreasonable shortage in individual containers.

7. **LABELLING**

In addition to the requirements of the General Standard for the Labelling of Prepackaged Foods (Ref. CODEX STAN. 1-195), (Rev. 1-1991), Codex Alimentarius Volume 1, the following specific provision apply:

7.1 **The Name of the Food**

7.1.1 The name of the product shall include:

- (a) the designation: "green beans" or "wax beans", as appropriate;
- (b) a declaration of any seasoning which characterizes the product, e.g. "with X", as appropriate.

7.1.2 The following shall be so stated on the label as to be easily discernible by the consumer:

the style: "Whole", "Shoestring", "Sliced Lengthwise", "French Style" "Cuts", "Short Cuts", or "Diagonal Cut", as appropriate.

7.1.3 The name of the product may include the varietal type "Round" or "Flat", if the product complies with the appropriate requirements set out in sub-section 1.2.

7.1.4 If the product is produced in accordance with the other styles provision (sub-section 1.3), the label shall contain in close proximity to the name of the product such additional words or phrases that will avoid misleading or confusing the consumer.

7.2 **Additional Requirements**

7.2.1 **Size Representation**

If a term designating size is used, it must be supported by an exact graphic representation of the maximum cross section of the bean pods or by a statement of the maximum diameter in millimetres.

8. **METHODS OF ANALYSIS AND SAMPLING**

See Codex Alimentarius Volume 13.