Subpart B—Requirements for Specific Standardized Canned Vegetables

§ 155.120 Canned green beans and canned wax beans.

(a) *Identity*—(1) *Definition*. Canned green beans and canned wax beans are the foods prepared from succulent pods of fresh green bean or wax bean plants conforming to the characteristics of *Phaseolus vulgaris* L. *and Phaseolus coccineus* L. The optional color and varietal types and styles of the bean ingredient are set forth in paragraph (a)(2) of this section. The product is packed with water or other suitable aqueous liquid medium to which may be added one or more of the other optional ingredients set forth in paragraph (a)(3) of this section. Such food is so processed by heat, in an appropriate manner before or after being sealed in a container, as to prevent spoilage.

(2) *Optional color and varietal types and styles of pack*. The optional color and varietal types and styles of the bean ingredient referred to in paragraph (a)(1) of this section are:

(i) *Optional color types*. The beans shall be one of the following distinct color types: (*a*) Green; or (*b*) Wax.

(ii) *Optional varietal types*—(*a*) *Round*. Beans having a width not greater than 1½ times the thickness of the bean; or

(*b*) *Flat*. Beans having a width greater than 1½ times the thickness of the bean.

(iii) *Optional styles of pack*—(*a*) *Whole*. Whole pods of any length.

(*b*) *Shoestring or sliced lengthwise or French style*. Pods sliced lengthwise.

(*c*) *Cuts*. Transversely cut pods not less than 19 mm (0.75 in) long as measured along the longitudinal axis, which may contain the shorter end pieces that result from cutting such pods.

(*d*) *Short cuts*. Pieces of pods cut transversely of which 75 percent, by count, or more are less than 19 mm (0.75 in) in length and not more than 1 percent by count are more than 32 mm (1¼ in) in length.

(*e*) *Diagonal cuts*. Pods cut in lengths as specified in paragraph (a)(2)(iii)(*c*) of this section, except the pods are cut at an angle approximately 45° to the longitudinal axis.

(*f*) *Diagonal short cuts*. Pods cut in lengths as specified in paragraph (a)(2)(iii)(*d*) of this section, except the pods are cut at an angle approximately 45° to the longitudinal axis.

(*g*) *Mixture*. Any mixture of two or more of the styles specified in paragraph (a)(2)(iii)(*a*) to (*f*), inclusive, of this section.

(3) *Optional ingredients*. In addition to the optional packing media listed in paragraph (a)(1) of this section and the optional types and styles of beans ingredient listed in paragraph (a)(2) of this section, the following safe and suitable optional ingredients may be used:

(i) Salt.

(ii) Monosodium glutamate.

(iii) Disodium inosinate.

(iv) Disodium guanylate.

(v) Hydrolyzed vegetable protein.

(vi) Autolyzed yeast extract.

(vii) Nutritive carbohydrate sweeteners.

(viii) Spice.

(ix) Flavoring (except artificial).

(x) Pieces of green or red peppers or mixtures of both, either of which may be dried, or other vegetables not exceeding in total 15 percent by weight of the finished product.

(xi) Vinegar.

(xii) Lemon juice or concentrated lemon juice.

(xiii) Glucono delta–lactone.

(xiv) Mint leaves.

(xv) Butter or margarine in a quantity of not less than 3 percent by weight of the finished product. When butter or margarine is added, emulsifiers or stabilizers, or both, may be added. No spice or flavoring simulating the color or flavor imparted by butter or margarine is used.

(4) *Labeling*. (i) The name of the food is ''green beans'' or ''wax beans'' as appropriate. Wax beans may be additionally designated ''golden'' or ''yellow''.

(ii) The following shall be included as part of the name or in conjunction with the name of the food:

(*a*) A declaration of any flavoring that characterizes the product as specified in § 101.22 of this chapter.

(*b*) A declaration of any spice, seasoning, or garnishing that characterizes the product, e.g., ''with added spice'', or, in lieu of the word ''spice'',

the common name of the spice, e.g., ''seasoned with green peppers''.

(*c*) The words ''vacuum pack'' or ''vacuum packed'' when the weight of the liquid in the container, as determined by the method prescribed in paragraph (b)(2)(i) of this section is not more than 25 percent of the net weight, and the container is closed under conditions creating a high vacuum in the container.

(*d*) The name of the optional style of bean ingredient as set forth in paragraph (a)(2)(iii) of this section or, if a product consists of a mixture of such styles, the words ''mixture of '' the blank to be filled in with the names of the styles present, arranged in the order of decreasing predominance, if any, by weight of such ingredients. If the product consists of whole beans and the pods are packed parallel to the sides of the container, the word ''whole'' may be preceded or followed by the words ''vertical pack'', or if the pods are cut at both ends and are of substantially equal lengths, the words ''asparagus style'' may be used in lieu of the words ''vertical pack''. If the product consists of short cuts or diagonal short cuts, a numerical expression indicating the predominate length of cut in the finished food may be used in lieu of the word ''short'', e.g., ''½ inch cut''.

(iii) The following may be included in the name of the food:

(*a*) The word ''stringless'' where the beans are in fact stringless.

(*b*) The name of the optional varietal type as specified in paragraph (a)(2)(ii) of this section, or the specific varietal name, e.g., ''Blue Lake Green Beans'', or both.

(iv) If a term designating diameter is used, it shall be supported by an exact graphic representation of the cross section of the bean pod or by a statement of the maximum diameter in common or decimal fractions of an inch and, optionally, by the millimeter equivalent stated parenthetically. The diameter of a whole, cut, diagonal cut, or short cut is determined by measuring the thickest portion of the pod at the shorter diameter of the bean perpendicular to the longitudinal axis.

(5) *Label declaration*. Each of the ingredients used in the food shall be declared on the label as required by the applicable sections of parts 101 and 130 of this chapter.

(b) *Quality*. (1) When tested by the method prescribed in paragraph (b)(2) of this section:

(i) In the case of cut beans and diagonal cut beans under paragraphs (a)(2)(iii) (*c*) and (*d*) of this section and mixtures of two or more optional forms under paragraph (a)(2)(iii)(*g*) of this section, not more than 60 units per 340 g (12 oz) drained weight are less than 13 mm (0.50 in) long: *Provided*, That where the number of units per 340 g (12 oz) drained weight exceeds 240, not more than 25 percent by count of the total units are less than 13 mm (0.50 in) long.

(ii) In case there are present pods or pieces of pods 10.7 mm (27/64-inch) or more in diameter, there are not more than 12 strings per 340 gm (12 ounces) of drained weight which will support 227 gm (one-half pound) for 5 seconds or longer.

(iii) The deseeded pods contain not more than 0.15 percent by weight of fibrous material.

(iv) There are not more than 10 percent by weight of blemished units of which amount not more than one-half may be materially damaged by insect or pathological injury. A unit is considered blemished when the aggregate blemished area exceeds the area of a circle 3 mm (⅛ in) in diameter. Materially damaged means that the unit is damaged to the extent that the appearance or eating quality of the unit is seriously affected.

(v) There are not more than 8 unstemmed units per 340 g (12 oz) drained weight.

(vi) The combined number of leaves, detached stems, and other extraneous vegetable matter shall not average more than 3 pieces per 340 g (12 oz) drained beans.

(2) Canned beans shall be tested by the following method to determine whether they meet the requirements of paragraph (b)(1) of this section:

(i) Determine the gross weight of the container. Open and distribute the contents of the container over the meshes of a U.S. No. 8 circular sieve with openings of 2.36 mm (0.0937 in), which has been previously weighed. The diameter

of the sieve is 20.3 cm (8 in) if the quantity of contents of the container is less than 1.36 kg (3 lb) and 30.5 cm (12 in) if such quantity is 1.36 kg (3 lb) or more. The bottom of the sieve is woven-wire cloth that complies with the specifications of such cloth set forth in ''Official Methods of Analysis of the Association of Official Analytical Chemists,'' 15th ed. (1990), vol. 2, p. xii, Table 1, ''Nominal Dimensions of Standard Test Sieves (USA Standard Series),'' under the heading ''Definitions of Terms and Explanatory Notes,'' which is incorporated by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from the Association of Official Analytical Chemists International, 481 North Frederick Ave., suite 500, Gaithersburg, MD 20877–2504, or may be examined at the Office of the Federal Register, 800 North Capitol St. NW., Seventh Floor, suite 700, Washington, DC. Without shifting the material on the sieve, incline the sieve 17 to 20° to facilitate drainage. Two minutes after drainage begins, weigh the sieve and the drained material. Record in grams (ounces) the weight so found, less the weight of the sieve, as the drained weight. Dry and weigh the empty container and subtract this weight from the gross weight to obtain the net weight. Calculate the percent of drained liquid in the net weight.

(ii) Pour the drained material from the sieve into a flat tray and spread it in a layer of fairly uniform thickness. Count the total number of units. For the purpose of this count, loose seeds, pieces of seed, loose stems, and extraneous material are not to be included. Divide the number of units by the drained weight recorded in paragraph (b)(2)(i) of this section and multiply by 340 to obtain the number of units per 340 g (12 oz) drained weight.

(iii) Examine the drained material in the tray, weigh and record weight of blemished units, count and record the number of unstemmed units; and, in case the material consists of the optional ingredient specified in paragraph (a)(2)(iii) (*c*), (*d*) or (*f*) of this section, count and record the number of units which are less than 13 mm (0.50 in.) long. If the number of units per 340 g (12 oz.) is 240 or less, divide the number of units which are less than 13 mm (0.50 in.) by the drained weight recorded in paragraph (b)(2)(i) of this section and multiply by 340 to obtain the number of such units per 340 g (12 oz.) drained weight. If the number of units per 340 g (12 oz.) exceeds 240, divide the number of units less than 13 mm (0.50 in.) long by the total number of units and multiply by 100 to determine the percentage by count of the total units which are less than 13 mm (0.50 in.) long.

(*a*) Divide the weight of blemished units by the drained weight recorded in paragraph (b)(2)(i) of this section and multiply by 100 to obtain the percentage by weight of blemished units in the container.

(*b*) Divide the number of unstemmed units by the drained weight recorded in paragraph (b)(2)(i) of this section and multiply by 340 to obtain the number of unstemmed units per 340 g (12 oz.) of drained weight.

(iv) Remove from the tray the extraneous vegetable material, count, record count, and return to tray.

(v) Remove from the tray one or more representative samples of 99 to 113 g (3½ to 4 ounces) covering each sample as taken to prevent evaporation.

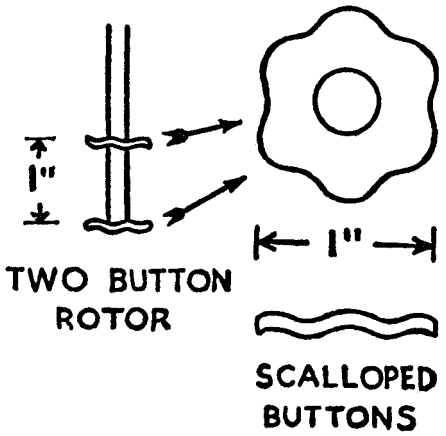
(vi) From each representative sample selected in paragraph (b)(2)(v) of this section, discard any loose seed and extraneous vegetable material and detach and discard any attached stems. Except with optional style of ingredient specified in paragraph (a)(2)(iii)(*b*) of this section (pods sliced lengthwise), trim off, as far as the end of the space formerly occupied by the seed, any portion of pods from which the seed has become separated. Remove and discard any portions of seed from the trimmings and reserve the trimmings for paragraph (b)(2)(viii) of this section. Weigh and record the weight of the trimmed pods. Deseed the trimmed pods and reserve the deseeded pods for paragraph (b)(2)(viii) of this section. Remove strings from the pods during the deseeding operation. Reserve these strings for testing as prescribed in paragraph (b)(2)(vii) of this section. In

the case of pods sliced lengthwise, remove seed and pieces of seed and reserve the deseeded pods for use as prescribed in paragraph (b)(2)(viii) of this section.

(vii) If strings have been removed for testing, as prescribed in paragraph (b)(2)(vi) of this section, test them as follows:

Fasten clamp, weighted to 250 g (8.8 oz.), to one end of the string, grasp the other end with the fingers (a cloth may be used to aid in holding the string), and lift gently. Count the string as tough if it supports the 250 g (8.8 oz.) weight for at least 5 seconds. If the string breaks before 5 seconds, test such parts into which it breaks as are 13 mm (½ in.) or more in length; and if any such part of the string supports the 250 g (8.8 oz.) weight for at least 5 seconds, count the string as tough. Divide the number of tough strings by the weight of the sample recorded in paragraph (b)(2)(v) of this section and multiply by 340 to obtain the number of tough strings per 340 g (12 oz.) drained weight.

(viii) Combine the deseeded pods with the trimmings reserved in paragraph (b)(2)(vi) of this section, and, if strings were tested as prescribed in paragraph (b)(2)(vii) of this section, add such strings broken or unbroken. Weigh and record weight of combined material. Transfer to the metal cup of a malted-milk stirrer and mash with a pestle. Wash material adhering to the pestle back into cup with 200 cc of boiling water. Bring mixture nearly to a boil, add 25 cc of 50 percent (by weight) sodium hydroxide solution and bring to a boil. (If foaming is excessive, 1 cc of capryl alcohol may be added.) Boil for 5 minutes, then stir for 5 minutes with a malted-milk stirrer capable of a no-load speed of at least 7,200 rpm. Use a rotor with two scalloped buttons shaped as shown in exhibit 1 as follows:



Transfer the material from the cup to a previously weighed 30-mesh monel metal screen having a diameter of about 9–10 cm (3½ to 4 in.) and side walls about 2.5 cm (1 in.) high, and wash fiber on the screen with a stream of water using a pressure not exceeding a head (vertical distance between upper level of water and outlet of glass tube) of 152 cm (60 in.), delivered through a glass tube 7.6 cm (3 in.) long and 3 mm (⅛ in.) inside diameter inserted into a rubber tube of 6 mm (¼ in.) inside diameter. Wash the pulpy portion of the material through the screen and continue washing until the remaining fibrous material, moistened with phenolphthalein solution, does not show any red color after standing 5 minutes. Again wash to remove phenolphthalein. Dry the screen containing the fibrous material for 2 hours at 100 °C, cool, weigh, and deduct weight of screen. Divide the weight of fibrous material by the weight of combined deseeded pods, trimmings, and strings and multiply by 100 to obtain the percentage of fibrous material.

(ix) If the drained weight recorded in paragraph (b)(2)(i) of this section was less than 340 g (12 oz.), open and examine separately for extraneous material, as directed in paragraph (b)(2)(iv) of this section, additional containers

until a total of not less than 340 g (12 oz.) of drained material is obtained. To determine the number of pieces of extraneous vegetable material per 340 g (12 oz.) of drained weight, total the number of pieces of extraneous vegetable material found in all containers opened, divide this sum by the sum of the drained weights in these containers and multiply by 340.

(3) Determine compliance as specified in §155.3(b) except that a lot shall be deemed to be in compliance for extraneous plant material based on an average of all containers examined.

(4) If the quality of the canned green beans or canned wax beans falls below the standard of quality prescribed by paragraph (b)(1) of this section, the label shall bear the general statement of substandard quality specified in §130.14(a) of this chapter, in the manner and form therein specified; but in lieu of the words prescribed for the second line inside the rectangle the following words may be used, when the quality of canned green beans or canned wax beans falls below the standard in one only of the following respects:

(i) ''Excessive number very short pieces'', if the canned green beans or canned wax beans fail to meet the requirements of paragraph (b)(1)(i) of this section.

(ii) ''Excessive number blemished units'', if they fail to meet the requirements of paragraph (b)(1)(iv) of this section.

(iii) ''Excessive number unstemmed units'', if they fail to meet the requirements of paragraph (b)(1)(v) of this section.

(iv) ''Excessive foreign material'', if they fail to meet the requirements of paragraph (b)(1)(vi) of this section.

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§ 155.130 Canned corn.

(a) *Identity*—(1) *Definition*. Canned sweet corn is the product prepared from clean, sound kernels of sweet corn packed with a suitable liquid packing medium which may include water and the creamy component from corn kernels. The tip caps are removed. The product is of the optional styles specified in paragraph (a)(2) of this section. It may contain one, or any combination of two or more, of the optional ingredients set forth in paragraph (a)(3) of this section. Such food is processed by heat, in an appropriate manner, before or after being sealed in a container, so as to prevent spoilage.

(2) *Styles*. The optional styles referred to in paragraph (a)(1) of this section consist of succulent sweet corn of the yellow (golden) or white color type, conforming to *Zea mays* L. having the sweet corn characteristic as follows:

(i) Whole kernel or whole grain or cut kernel consisting of whole or substantially whole cut kernels packed with a liquid medium.

(ii) Cream style consisting of whole or partially whole cut kernels packed in a creamy component from the corn kernels and other liquid or other ingredients to form a product of creamy consistency.

(3) *Optional ingredients*. The following safe and suitable optional ingredients may be used:

(i) Salt.

(ii) Monosodium glutamate.

(iii) Disodium inosinate.

(iv) Disodium guanylate.

(v) Hydrolyzed vegetable protein.

(vi) Autolyzed yeast extract.

(vii) Nutritive carbohydrate sweeteners.

(viii) Spice.

(ix) Flavoring (except artificial).

(x) Citric acid.

(xi) Starch or food starch-modified in cream style corn when necessary to ensure smoothness.

(xii) Seasonings and garnishes.

(*a*) Mint leaves.

(*b*) Pieces of green peppers or red peppers, or mixtures of both, either of which may be sweet or hot and may be dried, or other vegetables, not exceeding 15 percent by weight of the finished food.

(*c*) Lemon juice or concentrated lemon juice.

(*d*) Butter or margarine in a quantity not less than 3 percent by weight of the finished food. When butter or margarine is added, emulsifiers or stabilizers, or both, may be added. When