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INCH-POUND

A-A-20161A
March 21, 1997
SUPERSEDING
A-A-20161
December 22, 1987

COMMERCIAL ITEM DESCRIPTION

PIE FILLINGS, FRUIT, PREPARED

The U.S. Department of Agriculture has authorized the use of this Commercial Item Description.

1. SCOPE.

1.1 This Commercial Item Description (CID) covers prepared fruit pie fillings, packed in commercially acceptable containers, suitable for use by the Federal Government.

2. CLASSIFICATION.

2.1 The prepared fruit pie fillings shall conform to the following types and flavors as specified in the solicitation, contract, or purchase order.

Types and flavors:

Type I - Regular

Flavor A - Apple
Flavor B - Apricot

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FSC 8940

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Flavor C - Blueberry
Flavor D - Cherry
Flavor E - Peach

Type II - Lite

Flavor A - Apple
Flavor B - Blueberry
Flavor C - Cherry

3. SALIENT CHARACTERISTICS.

3.1 Processing: The fruit pie fillings shall be prepared from clean, sound, wholesome ingredients.

3.1.1 Food Chemicals Codex purity: The ingredients listed in the Food Chemicals Codex shall comply with the purity standards of the Food Chemicals Codex.

3.2 Raw ingredients: The fruit pie fillings shall be prepared from fresh, frozen, canned, or dried fruit, or a combination thereof. Dried fruit may be used for apricot and apple pie filling. The products shall contain nutritive sweeteners and thickening ingredients (i.e., starch, pectin, Irish moss extractives, and cellulose gums). The Type II pie fillings may contain non-nutritive sweeteners (i.e., saccharin). Apple pie filling shall contain a 2 to 1 ratio of ground cinnamon to ground nutmeg or 0.1 percent cinnamon and 0.05 percent nutmeg by weight of finished canned product or commercial spice blend that yields an acceptable product. Optional ingredients (i.e., lemon juice, citrates, fruit essence, seasonings, artificial colors, and preservatives) may be included. No sulfur dioxide yielding compounds may be used, except that sulfur dioxide may be used as a preservative for dried apricots and dried apples in accordance with Food and Drug Administration regulations.

3.2.1 Water: Water used in the formulation shall conform to the National Primary Drinking Water Regulations.

3.2.2 Fruit: Fruit ingredients shall be of the following U.S. Standards for Grades, as applicable.

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Raw Materials

Flavor	Fresh 1/	Frozen	Canned	Dried
Apple	U.S. No. 1 3/	U.S. Grade A	U.S. Grade A or better	U.S. Grade B 2/ or better
Apricot	U.S. No. 2 or better	U.S. Grade B 2/ or better	U.S. Grade B 2/ or better	U.S. Grade B 2/ or better
Blueberry	U.S. No. 1 or better	U.S. Grade B 2/ or better	U.S. Grade B 2/ or better	-----
Cherry	U.S. No. 1 or better	U.S. Grade B 2/ or better	U.S. Grade B 2/ or better	-----
Peach	U.S. No. 1 or better	U.S. Grade B 2/ or better	U.S. Grade B 2/ or better	-----

1/ Processing grades to be used, as available.
2/ Harmless extraneous material, such as pit fragments, stems, and the like, shall meet U.S. Grade A.
3/ Applicable only to product solicited during apple season. For out-of-season procurements, apples for pie filling must meet U.S. Grade C or better of U.S. Standards for Grades of Canned Sliced Apples.

3.3 Finished product: The prepared fruit pie fillings shall have the following characteristics:

3.3.1 Color, odor, and flavor: The prepared fruit pie fillings shall impart a color, odor, and flavor characteristic of the particular kind of fruit used.

3.3.2 Fruit ingredients: The fruit ingredients shall be reasonably uniform in size and color. There shall be no objectionable extraneous material. The fruit ingredients shall be practically free from defects to such a degree that appearance or eating quality is not affected.

3.3.3 Texture: Fruit texture of the prepared fruit pie filling shall be firm, not hard or mushy.

3.3.4 Consistency: Fruit glaze shall not exhibit syneresis.

3.3.5 Drained weight: Unless otherwise specified, the minimum percent drained weight of fruit pie fillings shall be as follows: Apple shall be not less than 50.0 1/; apricot and cherry shall be not less than 36.0; blueberry shall be not less than 30.0; and peach not less than 40.0.

1/ For Jonathan, Rome, Ida Red, Winesap, or Golden Delicious apple varieties the minimum percent washed drained weight shall be 44.0.

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3.3.6 Spreadometer range: Unless otherwise specified, the spreadometer range in centimeters after 1 minute at 72°F shall be as follows: Apple shall range from 7.5 to 10.5; apricot, blueberry, cherry, and peach shall range from 8.5 to 10.5.

3.4 Thermoprocessing: When specified in the solicitation, contract, or purchase order, the fruit pie fillings shall be thermally processed until commercially sterile.

3.5 Analytical requirements: Unless otherwise specified, analytical requirements for the types of fruit pie filling shall be as follows:

Flavor	Style	Minimum soluble solids for Type I (degree Brix)	Minimum soluble solids for Type II (degree Brix)	pH
Apple	Slices	25.0	8.0	3.2 to 3.6
Blueberry	Whole	27.0	11.0	3.4 to 3.8
Cherry	Whole	25.0	8.0	3.4 to 3.8
Apricot	Halves	30.0		3.6 to 4.0
Peach 1/	Slices/ strips	27.0		3.3 to 3.8

1/ Peaches shall be of the clingstone type.

3.5.1 Analytical procedure: One unit of product shall be selected at random regardless of the lot size.

3.5.2 Analytical testing: Analysis shall be made in accordance with the following Official Methods of Analysis of the AOAC International:

Test	Method
Soluble solids	932.12
pH	960.19

3.5.3 Test results: The test results for pH shall be reported to the nearest 0.1 value and soluble solids results to the nearest 1.0° Brix. Any result not conforming to the finished product requirements shall be cause for rejection of the lot.

4. REGULATORY REQUIREMENTS.

4.1 The delivered prepared fruit pie fillings shall comply with all applicable Federal and State mandatory requirements and regulations relating to the preparation, packaging, labeling, storage, distribution, and sales of the prepared fruit pie fillings within the commercial marketplace.

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Delivered prepared fruit pie fillings shall comply with all applicable provisions of the Federal Food, Drug, and Cosmetic Act and regulations promulgated thereunder.

5. QUALITY ASSURANCE PROVISIONS.

5.1 Product conformance. The prepared fruit pie fillings shall meet the salient characteristics of this CID, conform to the producer's own specifications, standards, and quality assurance practices, and be the same fruit pie fillings offered for sale in the commercial market. The Government reserves the right to require proof of such conformance.

5.2 Certification. Fresh fruit used in preparation of the finished product shall be certified by the Fresh Products Branch (FPB), Fruit and Vegetable Division, Agricultural Marketing Service, U.S. Department of Agriculture.

5.3 Quality assurance. When required in the solicitation, contract, or purchase order, that product quality or acceptability or both be determined, the Processed Products Branch (PPB), Fruit and Vegetable Division, Agricultural Marketing Service, U.S. Department of Agriculture, shall be the certifying activity and shall make the determination in accordance with applicable PPB procedures. The prepared fruit pie fillings shall be examined or analyzed or both in accordance with applicable provisions in this CID, solicitation, contract, or purchase order, and when applicable, the United States Standards for Condition of Food Containers in effect on the date of the solicitation.

5.4 Drained weight procedures.

(a) Five sample units of one type of pie filling shall be randomly selected from the lot. Determine and record the net weight of each sample. Transfer the contents of the can to a flat bottom container.

(b) A minimum of three times the sample's volume of 68-72° Fahrenheit water shall be added to the container so as to cover the contents. The contents and water shall be gently agitated to separate the fruit without breaking up the fruit pieces.

(c) The contents shall then be poured into a U.S. Standard No. 8 sieve in a manner that will distribute the product evenly over the sieve without breaking the fruit. Sieve area shall be such that the distributed product does not completely cover all the openings in the sieve. The sieve shall be tilted at about a 45° angle and allowed to drain for two minutes before determining the drained weight by subtracting the sieve tare weight from the gross weight. A U.S. Standard No. 20 sieve shall be used to catch the additional fruit particles that fall through the U.S. Standard No. 8 sieve. The weight from the U.S. Standard No. 20 sieve shall be added to the fruit weight from the U.S. Standard No. 8 sieve to determine the final drained weight. The resulting drained weight shall be divided by the net weight of the sample and multiplied by 100 to obtain

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the percent washed drained weight. Any individual sample more than two percent (2%) under the requirement or a sample average less than the requirement shall be cause for rejection of the lot.

5.5 Spreadometer test equipment and procedures.

5.5.1 Equipment.

(a) A 24-inch square platform scribed with 30 concentric circles 1 centimeter apart, equipped with leveling screws and a glass plate cover.
(b) Spreadometer lifting device or its equivalent.
(c) No. 2 can (307 x 409) with both ends removed.
(d) A clear plastic over-cap.
(e) Spatula or suitable tool.

5.5.2 Procedures for spreadometer test.

(a) Condition samples until a product temperature of 72° ± 5°F has been reached.
(b) Level the platform.
(c) Thoroughly mix the sample contents, taking care not to crush the individual fruit particles. Place a plastic over-cap over one open end. Carefully place 22 ounces net weight in the No. 2 can.
(d) Place a clear plastic plate on the open end of the can cylinder, center, invert, remove the plastic over-cap. Transfer pie filling adhering to the over-cap to the cylinder, level the pie filling. Raise the cylinder gently to a height of 1-1/4 inches. (In the case of a heavy viscosity apple pie filling, it may be necessary to raise the can to a height of 1-1/2 inches to allow the product to flow freely from the can. This latter adjustment may be made during the spread time.) Wipe the inside of the cylinder with a spatula in a circular manner.
(e) Hold can in this position and record the extent of spread at four equally-spaced radial points after 1 minute.
(f) Calculate the average of the four readings to determine compliance with requirements on page 4 of this CID.

6. PACKAGING.

6.1 Preservation, packaging, packing, labeling, and case marking. Preservation, packaging, packing, labeling, and case marking shall be as specified in the solicitation, contract, or purchase order.

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7. NOTES.

7.1 Purchasers shall specify:

- Type(s) and flavor(s) of prepared fruit pie filling required.

7.2 Sources of documents.

7.2.1 Sources of information for nongovernmental documents are as follows:

Copies of the Official Methods of Analysis of the AOAC may be obtained from: **AOAC International, 481 North Frederick Avenue, Suite 500, Gaithersburg, MD 20877.**

Copies of the Food Chemicals Codex may be purchased from: **National Academy Press, 2101 Constitution Avenue, NW, Washington, DC 20418.**

7.2.2 Sources of information for governmental documents are as follows:

Applicable provisions of the Federal Food, Drug, and Cosmetic Act are contained in 21 CFR Parts 1 to 199. This document set may be purchased from: **Superintendent of Documents, ATTN: New Orders, P.O. Box 371954, Pittsburgh, PA 15250-7954.** Credit card (MasterCard or Visa) purchases may be made by calling the Superintendent of Documents at (202) 512-1800.

Copies of the United States Standards for Condition of Food Containers are available from: **Chairperson, Condition of Container Committee, STOP 0243, 1400 Independence Avenue, SW, Washington, DC 20250-0243.**

Copies of the United States Standards for Grades for fresh fruits and vegetables are available from: **Chief, Fresh Products Branch, STOP 0240, 1400 Independence Avenue, SW, Washington, DC 20250-0240.**

Copies of the United States Standards for Grades for processed fruit and vegetable products are available from: **Chief, Processed Products Branch, STOP 0247, 1400 Independence Avenue, SW, Washington, DC 20250-0247.**

Copies of the National Primary Drinking Water Regulations may be obtained from: **Office of Drinking Water, Environmental Protection Agency, WH550D, 401 M Street, SW, Washington, DC 20460.**

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Civil agencies and other interested parties may obtain copies of this CID from: **General Services Administration, Federal Supply Service, Specifications Section, Suite 8100, 470 East L'Enfant Plaza, SW, Washington, DC 20407.**

Military activities should submit request for copies of this CID to: **Standardization Documents Order Desk, Defense Automation Printing Service, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.**

MILITARY INTERESTS: ACTIVITIES:

Custodians

Army - GL
Navy - SA
Air Force - 35

Review Activities

Army - MD, QM
Navy - MC

CIVIL AGENCY COORDINATING

DOJ - BOP
HHS - NIH, IHS
USDA - FV
VA - OSS

PREPARING ACTIVITY:

DLA - SS

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