

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 in preference to Military Specification MIL-P-35029.

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

Salient characteristics.

The products shall be prepared from clean, sound, mature, commercially prepared, fresh, frozen, or canned fruit, or a combination thereof. Dried fruit may be used for apple pie filling. The products shall contain approved nutritive sweeteners and thickening ingredients (i.e., starch, pectin, Irish moss extractions, and cellulose gums). Optional ingredients (i.e., lemon juice, citrates, fruit essence, seasonings, 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 apples in accordance with Food and Drug Administration regulations.

Grades.

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

Type Raw Materials

<u>Type</u>	<u>Fresh</u> <u>1/</u>	<u>Frozen</u>	<u>Canned</u>	<u>Dried</u>
Apple	U.S. No. 1	U.S. Grade A	U.S. Grade A	U.S. Grade B <u>2/</u> or better
Apricot	U.S. No. 2 or better	U.S. Grade B <u>2/</u> or better	U.S. Grade B <u>2/</u> or better	-----
Blueberry	U.S. No. 1	U.S. Grade B <u>2/</u> or better	U.S. Grade B <u>2/</u> or better	-----
Cherry	U.S. No. 1	U.S. Grade B <u>2/</u> or better	U.S. Grade B <u>2/</u> or better	-----
Peach	U.S. No. 1	U.S. Grade B <u>2/</u> or better	U.S. Grade B <u>2/</u> 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.

FSC 8940

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

A-A-20161

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

Physical and analytical requirements.

The finished product shall comply with the physical and analytical requirements for the types and styles of fruit specified below.

<u>Type</u>	<u>Style</u>	<u>Minimum soluble solids (degree Brix)</u>	<u>pH</u>	<u>Minimum percent washed drained weight</u>	<u>Spreadometer range in cm after 1 min. at 72° 50°</u>
Apple	Slices	26.0	3.2 to 3.5	50.0 (44.0) <u>1/</u>	7.5 to 10.5
Apricot	Halves	31.0	3.3 to 3.5	36.0	8.5 to 10.5
Blueberry	Whole	27.0	3.3 to 3.5	30.0	8.5 to 10.5
Cherry	Whole	27.0	3.3 to 3.5	36.0	8.5 to 10.5
Peach	Slices/ strips	27.0	3.3 to 3.5	40.0	8.5 to 10.5

1/ For Jonathan, Rome, Ida Red, Winesap, or Golden Delicious apple varieties only.

The finished product shall possess the color and flavor characteristics of the particular kind of fruit used. Fruit glaze shall not exhibit syneresis. Fruit texture shall be firm, not hard or mushy. Fruit ingredients shall be reasonably uniform in size and color. There shall be no objectionable extraneous material. Fruit component shall be practically free from defects to such a degree that appearance or eating quality is not materially affected.

Analytical methods shall be in accordance with the latest edition of the Official Methods of Analysis of the Association of Analytical Chemists or other methods specified as follows:

<u>Test</u>	<u>Source</u>	<u>Method</u>
Soluble solids	Chapter: Fruits and Fruit Products	Refractometer
pH	Chapter: Beverages: Wines	Direct
Spreadometer range	See equipment and test procedure as indicated on page 3 of this CID.	Spreadometer

Contractor's certification.

By submitting an offer, the contractor certifies that the product offered meets the specified salient characteristics and requirements of this CID; conforms to

the producer's own specifications and standards, including product characteristics, manufacturing procedures, quality control procedures, and storage and handling practices; has a national or regional distribution from storage facilities located within the United States, its territories, or possessions; and is sold on the commercial market. The Government reserves the right to determine proof of such conformance prior to the first delivery from point of origin and any time thereafter, up to and including delivery at final destination, as may be necessary to determine conformance with the provisions of the contract.

Regulatory requirements.

The delivered product shall comply with all applicable Federal and State mandatory requirements and regulations relating to the preparation, packaging, labeling, storage, distribution, and sales of the product in the commercial marketplace. All deliveries shall conform in every respect to the provisions of the Federal Food, Drug, and Cosmetic Act and regulations promulgated thereunder.

Quality assurance.

When required in the solicitation, contract, or purchase order, the Processed Products Branch, Fruit and Vegetable Division, Agricultural Marketing Service, U.S. Department of Agriculture, will determine the quality assurance of the prepared fruit pie fillings according to Processed Products Branch procedures. The product shall be examined and/or analyzed in accordance with applicable provisions in the CID, and when applicable, the United States Standards for Condition of Food Containers currently in effect on the date of the solicitation.

Equipment for spreadometer test.

1. A 24-inch square platform scribed with 30 concentric circles 1 centimeter apart, equipped with leveling screws and a glass plate cover.
2. Spreadometer lifting device or its equivalent.
3. No. 2 can (307 x 409) with two holes punched in the closed end and covered with tape.
4. A sheet of aluminum insulating foil.

Test procedure for spreadometer test.

1. Condition samples until a product temperature of 72° _ 10°F has been reached.
2. Level the platform.
3. In the case of a No. 2 can (307 x 409), open and use can contents as is or, in the case of a No. 10 can, thoroughly mix the contents, taking care not to crush the individual fruit particles, and place 22 ounces net weight in the No. 2 can with the two taped holes.
4. Carefully place can with open end down over the center of the spreadometer with the aid of the aluminum foil. Remove aluminum foil. Punch two or more holes in the unopened end of the can or remove tape from the previously

A-A-20161

punched can and raise can smoothly without jerking so that the bottom edge is 1-1/4 inches above the glass plate. (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.)

5. Hold can in this position and record the extent of spread at four equally-spaced radial points after 1 minute.
6. Calculate the average of the four readings to determine compliance with requirements on page 2 of this CID.

Preservation, packaging, packing, labeling, and marking.

The product shall be preserved, packaged, packed, labeled, and case marked in accordance with good commercial practice. Commercial labeling and packaging, as may be augmented by the solicitation, contract, or purchase order, shall be acceptable. Shipping containers shall comply with National Motor Freight Classification or Uniform Freight Classification, as applicable.

For Department of Defense procurements.

The following requirements are applicable when specified by the contracting officer:

A. Commercial packaging. Not less than 20 ounces shall be packaged in a 307 x 409 (No. 2) can. Seven pounds shall be packaged in a 603 x 700 (No. 10) can (apple pie filling shall not be less than 110 ounces avoirdupois). The filled and hermetically sealed can shall have a vacuum of not less than 8 inches of mercury.

B. Commercial packing. Cans shall be packed in fiberboard boxes complying with Uniform Freight Classification or National Motor Freight Classification.

C. Export packaging. Twenty-two ounces shall be packaged in a 307 x 409 (No. 2) can. Seven pounds shall be packaged in a 603 x 700 (No. 10) can (apple pie filling shall not be less than 110 ounces avoirdupois). The filled can shall be an open-top, tin-plated metal can with welded or soldered side seams and compound-lined, double-seamed ends.

Cans used for cherry and blueberry products shall have body and end tinplating weights of minimum 0.75 lb/base box on the inside and 0.20 lb/base box on the outside. The interior of the bodies and ends shall be enameled and the side seams striped.

Cans used for other products shall have body tinplating weights of minimum 0.75 lb/base box on the inside and 0.20 lb/base box on the outside and end tinplating weights of minimum 0.20 lb/base box on the inside and 0.20 lb/base box on the outside. The interior of the bodies shall be plain or enameled and the interior of the ends shall be enameled.

The filled and hermetically sealed can shall have a vacuum of not less than 8 inches of mercury.

D. Export packing. Twelve 307 x 409 cans or six 603 x 700 cans shall be packed in a fiberboard box constructed, closed, and reinforced in accordance with Grade V3c, V3s, or V4s, Style RSC of PPP-B-636. Reinforcement shall be limited to nonmetallic strapping or pressure-sensitive adhesive, filament-reinforced tape.

E. Unit loads. Shipping containers shall be arranged in unit loads in accordance with MIL-L-35078. When unit loads are strapped, strapping shall be limited to nonmetallic strapping, except for Type II, Class F loads.

F. Labeling. Commercial labeling shall be acceptable.

G. Marking. Marking of shipping containers and unit loads shall be in accordance with MIL-STD-129.

Notes.

Purchasers shall specify product types.

Sources of documents:

Sources of information for nongovernmental documents are as follows:

Copies of the Official Methods of Analysis of the Association of Official Analytical Chemists may be obtained from:

Association of Official Analytical Chemists
1111 North 19th Street
Suite 210
Arlington, VA 22209

Copies of the National Motor Freight Classification may be obtained from:

National Motor Freight Traffic Association, Inc., Agent
National Motor Freight Classification
American Trucking Associations, Inc., Traffic Department
2200 Mill Road
Alexandria, VA 22314

Copies of the Uniform Freight Classification may be obtained from:

Uniform Classification Committee, Agent
Uniform Freight Classification
Uniform Classification Committee, Suite 1120
222 South Riverside Plaza
Chicago, IL 60606

A-A-20161

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 three-volume set may be purchased from:

Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402

Copies of the United States Standards for Condition of Food Containers are available from:

Director
Market Research and Development Division
Agricultural Marketing Service
U.S. Department of Agriculture
P.O. Box 96456
Washington, DC 20090-6456

Copies of the United States Standards for Grades of fruit and vegetable products are available from:

Director
Fruit and Vegetable Division
Agricultural Marketing Service
U.S. Department of Agriculture
P.O. Box 96456
Washington, DC 20090-6456

Civil agencies and other interested parties may obtain copies of this CID from:

General Services Administration
Specifications Section (WFCIS)
Room 6662
7th and D Streets, SW
Washington, DC 20407

Military activities should submit request for copies of this CID to:

Naval Publications and Forms Center
5801 Tabor Avenue
Philadelphia, PA 19120

A-A-20161

Comments and suggestions.

Comments and suggestions regarding this CID should be submitted to:

U.S. Army Natick Research,
Development and Engineering Center
ATTN: STRNC-ESS
Natick, MA 01760-5014

MILITARY INTERESTS:

CIVIL AGENCY COORDINATING ACTIVITIES:

Custodians

Army - GL
Navy - SA
Air Force - 50

DOJ - BOP
HHS - FDA, NIH
USDA - MRD
VA - OSS

Review Activities

Army - MD, TS
Navy - MC, MS
DP - SS

PREPARING ACTIVITY:

Army - GL
Project No. 8940-0588