COMMERCIAL ITEM DESCRIPTION

FRUIT PUREES

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

1. SCOPE. This Commercial Item Description (CID) covers fruit purees, packed in commercially acceptable containers, suitable for use by the Federal, State, local governments and other interested parties.

2. PROCUREMENT NOTES.

2.1 Purchasers shall specify the following:

- Types, flavors, acidification, styles, and seeds (Sec. 3).
- When analytical requirements are different than specified (Sec. 6.1).
- When analytical requirements need to be verified (Sec. 6.4).
- Manufacturer’s distributor’s certification (Sec. 9.2) or USDA certification (Sec. 9.3).

2.2 Purchasers may specify the following:

- Manufacturer’s quality assurance (Sec. 9.1 with 9.1.1) or (Sec. 9.1 with 9.1.2).

3. CLASSIFICATION.

3.1 The fruit purees shall conform to the following types, flavors, acidification, styles, and seeds specified in the solicitation, contract, or purchase order.
Types, flavors, styles, acidification, seeds.

Type I - Frozen

Flavor A - Apricot

Flavor B - Banana
  Acidification 1 – Acidified
  Acidification 2 – Not acidified

Flavor C - Blackberry (Marion or Evergreen)
Flavor D - Blueberry
Flavor E - Cherry
Flavor F - Peach
Flavor G - Raspberry
Flavor J - Other

Type II - Shelf stable

Flavor B – Banana
  Acidification 1 - Acidified
  Acidification 2 - Not acidified

Flavor H - Fig
Flavor I - Plum (Prune)
Flavor J - Other

Style a - Single strength
Style b - Concentrated

Seeds i - With seeds
Seeds ii - Without seeds

4. MANUFACTURER’S/DISTRIBUTOR’S NOTES. Manufacturer’s/distributors’ products shall meet the requirements of the:

- Salient characteristics (Sec. 5).
- Analytical requirements: as specified by the purchaser (Sec. 6).
- Manufacturer’s/distributor’s assurance (Sec. 7).
- Regulatory requirements (Sec. 8).
- Quality assurance provisions: as specified by the purchaser (Sec. 9).
5. SALIENT CHARACTERISTICS

5.1 **Processing.** The fruit purees shall be obtained from wholesome fruits and/or juice concentrate. All fruit purees shall be prepared in accordance with good commercial practice. A fruit puree is pulped and screened fruit that may or may not have a portion of the water physically removed.

5.2 **Flavor and odor.** The finished fruit purees product shall have a mild fruity flavor and odor typical of the type of fruit which the puree was derived. The fruit purees shall have no foreign odors or flavors, such as, but not limited to, stale, yeasty, burnt, musty, rancid or moldy.

5.3 **Color.** The finished purees shall have a bright color (free from oxidation) that is typical of the fruit from which it was derived.

5.4 **Consistency.** The finished fruit purees shall be a homogeneous product that is pliable and any lumps that are present should be easily broken under gentle pressure. Lumps in the finished fruit purees shall not exceed 6.35 mm (¼ inch) in diameter. All fruit purees shall be easily spreadable.

5.5 **Age requirement.** Unless otherwise specified in the solicitation, contract, or purchase order, the fruit purees shall be manufactured from the latest year’s crop.

5.6 **Additives or preservatives.** The fruit purees shall be processed without the addition of additives and the use of preservatives is limited to potassium sorbate and/or sorbic acid with the exception of acidified banana puree, which may include citric acid and ascorbic acid. Water may be added if required to standardize Brix levels to meet the specification level.

5.6.1 **Type II; Style A (fig puree).** The fig puree shall be combined with water, lemon juice (from concentrate), and pectin, with potassium sorbate added as a preservative.

5.7 **Shelf life.** The manufacturer shall guarantee a minimum shelf life for the fruit purees between nine and twelve months from the date of delivery.

5.8 **Defects.** Fruit purees that have a U.S. Food and Drug Administration (FDA) tolerance for “Defect Action Levels” shall not exceed the specified U.S. FDA tolerance. Each type of fruit puree shall be free from pit fragments, and shall be reasonably free from, but not limited to stems, and black, brown, green or other discolored tissue that are readily noticeable in a 454 g (16 ounce) sample. Each type of fruit puree without seeds shall be screened to eliminate large seeds that are readily noticeable. Stems; black, brown, green or other discolored tissue shall not include more than 1 piece that is over 4.75 mm (3/16 inch) in any dimension.
5.9 **Foreign material.** All fruit purees shall be clean, sound, wholesome, and free from evidence of foreign material such as, but not limited to, dirt, silt, sand, thorns, insect parts, hair, wood, glass, or metal.

6. **ANALYTICAL REQUIREMENTS.**

6.1 **Chemical and microbiological tolerances.** Unless otherwise specified in the solicitation, contract or purchase order, analytical and microbiological requirements for all fruit purees shall comply with the following:

- Aerobic (Standard) plate count: Less than 50,000 per gram in any sample
- Yeast: Less than 5,000 Colony Forming Units (CFU) per gram
- Mold: Less than 5,000 CFU per gram
- Coliform: Less than 100 per gram using the MPN (Most Probable Number) technique
- *E. coli*: Less than 3 per gram using the MPN technique

6.1.1 **Moisture.** The fruit purees shall have a moisture content between 18-30 percent, ± 2.0 percent except fig puree. Fig puree shall have a moisture content of 28 percent ± 2.0 percent.

6.1.2 **Brix and pH.** The fruit purees shall have the following minimum degrees Brix and pH:

<table>
<thead>
<tr>
<th></th>
<th>Single Strength °Brix</th>
<th>Concentrate °Brix</th>
<th>pH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple</td>
<td>10.0 – 15.0°</td>
<td>30.0 – 38.0°</td>
<td>3.2 - 4.2</td>
</tr>
<tr>
<td>Apricot</td>
<td>10.0 – 14.0°</td>
<td>30.0 – 32.0°</td>
<td>3.2 - 4.2</td>
</tr>
<tr>
<td>Banana</td>
<td>21.0 – 24.0°</td>
<td>32.0 – 45.0°</td>
<td>4.2 - 4.5</td>
</tr>
<tr>
<td>Blueberry</td>
<td>8.0 – 13.0°</td>
<td>28.0°</td>
<td>2.8 - 3.2</td>
</tr>
<tr>
<td>Evergreen</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blackberry</td>
<td>10.5 - 18.0°</td>
<td>28.0 - 40.0°</td>
<td>3.46 - 3.71</td>
</tr>
<tr>
<td>Marion Blackberry</td>
<td>9.0 - 16.0°</td>
<td>28.0 – 40.0°</td>
<td>2.8 - 3.8</td>
</tr>
</tbody>
</table>
### Table

<table>
<thead>
<tr>
<th></th>
<th>Single Strength °Brix</th>
<th>Concentrate °Brix</th>
<th>pH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cherry</td>
<td>8.0 – 14.0°</td>
<td>32.0°</td>
<td>3.45 - 3.8</td>
</tr>
<tr>
<td>Fig</td>
<td>45.0°</td>
<td>70.0°</td>
<td>3.2 - 4.2</td>
</tr>
<tr>
<td>Peach</td>
<td>8.0 - 3.0°</td>
<td>30.0 – 32.0°</td>
<td>3.2 - 4.2</td>
</tr>
<tr>
<td>Plum (prune)</td>
<td>18.5 – 19.0°</td>
<td>70.0°</td>
<td>3.0 - 4.2</td>
</tr>
<tr>
<td>Black Raspberry</td>
<td>10.5 – 18.0°</td>
<td>32.0°</td>
<td>3.1 - 4.3</td>
</tr>
<tr>
<td>Red Raspberry</td>
<td>8.0 - 15.0°</td>
<td>32.0°</td>
<td>3.0 – 3.66</td>
</tr>
<tr>
<td>Strawberry</td>
<td>6.0 – 8.0°</td>
<td>28.0°</td>
<td>3.3 - 4.0</td>
</tr>
</tbody>
</table>

### 6.2 Product Verification
When USDA verification of analytical requirements is specified in the solicitation, contract, or purchase order, the following procedures are followed.

#### 6.2.1 Sampling procedures
USDA inspection service will select the number of product containers based on USDA inspection service sampling procedures and plans.

#### 6.2.2 Composite sample
A portion of the sample units shall be used to make a 454 g (16 ounce) composite sample.

### 6.3 Preparation of sample
Product shall be prepared in accordance with the Official Methods of Analysis of the AOAC International Method 945.68.

### 6.4 Analytical testing
When specified in the solicitation, contract, or purchase order, the analyses shall be made in accordance with the following methods from the Official Methods of Analysis of the AOAC International or as specified below:

<table>
<thead>
<tr>
<th>Test</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brix</td>
<td>932.12</td>
</tr>
<tr>
<td>Moisture</td>
<td>934.06</td>
</tr>
<tr>
<td>pH</td>
<td>981.12</td>
</tr>
<tr>
<td>Standard Plate Count</td>
<td>990.12 or 966.23</td>
</tr>
<tr>
<td>Yeast and Mold</td>
<td>997.02 or 1/</td>
</tr>
<tr>
<td>Coliform</td>
<td>966.24</td>
</tr>
<tr>
<td>E. coli</td>
<td>966.24</td>
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</tbody>
</table>

6.5 **Test results.** The test results for Brix shall be reported to the nearest 0.1 degree. The test results for moisture shall be reported to the nearest 0.1 percent. The test results for pH shall be reported the nearest 0.1 value. The test results for standard plate count shall be reported to the nearest 100 per gram. The test results for yeast and mold shall be reported to the nearest 50 per gram. The test results for *Coliform* and *E. coli* shall be reported to the nearest MPN. Any result not conforming to the finished product requirements shall be cause for rejection of the lot.

7. **MANUFACTURER’S PRODUCT ASSURANCE.** The manufacturer shall certify that the fruit purees provided shall meet the salient characteristics of this CID, conform to the their own specifications, standards, and quality assurance practices, and be the same prepared fruit purees offered for sale in the commercial market. The purchaser reserves the right to require proof of conformance.

8. **REGULATORY REQUIREMENTS.** The delivered fruit purees shall comply with all applicable Federal, State, and local mandatory requirements and regulations relating to the preparation, packaging, labeling, storage, distribution, and sale of fruit purees within the commercial marketplace. Delivered fruit purees shall comply with all applicable provisions of the Federal Food, Drug, and Cosmetic Act and regulations promulgated thereunder.

9. **QUALITY ASSURANCE PROVISIONS.** Purchaser shall specify 9.2 or 9.3; purchaser may specify 9.1 with 9.1.1 or 9.1 with 9.1.2.

9.1 **Manufacturer’s quality assurance.** When required in the solicitation, contract, or purchase order, the product manufacturer shall be required to provide evidence, by certificate, that the manufacturing plant has undertaken one of the following quality assurance measures within 12 months prior to providing a bid, or no later than 10 business days from the date of awarding of the contract. Failure to provide this documentation within the proper time frame will result in the contract being terminated for cause.

9.1.1 **Plant systems audit.** A plant systems audit (PSA) shall be conducted by USDA, Agricultural Marketing Service (AMS), or other third party auditing service, within 12 months prior to the date of the awarding of the contract. *(An AMS PSA verifies the manufacturer’s capability to produce products in a clean, sanitary environment [21 CFR 110 – Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Human Food Regulations], adhere to food safety requirements, and have in place an internal quality assurance program. The AMS PSA determines the manufacturer’s ability to produce under this CID, if the products of interest are identified at the time of the PSA.)*

9.1.2 **Plant survey.** A plant survey shall be conducted by USDA, AMS, or other third party auditing service, within 12 months prior to the date of the awarding of the contract. *(An AMS plant survey audit verifies that, at the time of the survey, the manufacturer produces products in a clean, sanitary environment in accordance with 21 CFR 110 – Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Human Food Regulations.)*
9.2 **Manufacturer’s/distributor’s certification.** When required in the solicitation, contract, or purchase order, the manufacturer/distributor will certify that the finished fruit purees distributed meets or exceeds the requirements of this CID.

9.3 **USDA certification.** When required in the solicitation, contract, or purchase order that product quality and acceptability or both be determined, the Processed Products Branch (PPB), AMS, USDA, shall be the certifying program. PPB inspectors shall certify the quality and acceptability of the fruit purees in accordance with PPB procedures which include selecting random samples of the packaged fruit purees, evaluating the samples for conformance with the salient characteristics of this CID and other contractual requirements, and documenting the findings on official PPB score sheets and/or certificates. In addition, when required in the solicitation, contract, or purchase order, PPB inspectors will examine the fruit purees for conformance to the United States Standards for Condition of Food Containers in effect on the date of the solicitation.

10. **PACKAGING.** Preservation, packaging, packing, labeling, and case marking shall be commercial unless otherwise specified in the solicitation, contract, or purchase order.

11. **USDA INSPECTION NOTES.** When Section 9.3 is specified in the solicitation, contract, or purchase order, USDA certification shall include evaluation of the quality and condition of samples of packaged fruit purees, and compliance with requirements in the following areas:

- Salient characteristics (Sec. 5.2 - 5.6, 5.8 and 5.9).
- Analytical requirements *when specified in the solicitation, contract, or purchase order* (Sec. 6.4). When USDA analytical testing is specified, PPB inspection personnel shall select samples and submit them to the USDA, Science and Technology Program (S&TP) laboratory for analysis.
- Packaging requirements (Sec. 10 or as specified in the solicitation, contract, or purchase order).

12. **REFERENCE NOTES.**

12.1 **USDA certification contact.** For USDA certification, contact the Branch Chief, PPB, Fruit and Vegetable Program, AMS, USDA, STOP 0247, 1400 Independence Avenue, SW, Washington, DC 20250-0247, telephone (202) 720-4693, Fax (202) 690-1527, or via E-mail: james.rodeheaver@usda.gov.

12.2 **USDA laboratory contacts.**

12.2.1 **Analytical testing.** For USDA analytical testing, contact the Branch Chief, Laboratory Operations Coordination Staff, S&TP, AMS, USDA, STOP 0271, 1400 Independence
Avenue, SW, Washington, DC 20250-0271, telephone (202) 690-1351, or via E-mail: scott.lough@usda.gov.

12.2.2 **Technical information.** For USDA technical information on analytical testing, contact the Branch Chief, Technical Service Branch, S&TP, AMS, USDA, STOP 0272, 1400 Independence Avenue, SW, Washington, DC 20250-0272, telephone (202) 690-0621, or via E-mail: anita.okrend@usda.gov.

12.3 **Sources of documents.**

12.3.1 **Sources of information for nongovernmental documents are as follows:**

Copies of the Official Methods of Analysis of the AOAC International may be obtained from: AOAC International, 481 North Frederick Avenue, Suite 500, Gaithersburg, MD 20877 or on the Internet at http://www.aoac.org.


12.3.2 **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 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 on (202) 512-1803 or on the Internet at: http://www.nara.gov/fedreg.

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

Requests for copies, beneficial comments, recommendations, additions, deletions, clarifications, etc., and any data which may improve this document should be sent to: Program Head, Food Quality Assurance Staff, AMS, USDA, STOP 0243, 1400 Independence Avenue, SW, Washington, DC 20250-0243, telephone (202) 720-9939, Fax (202) 690-0102, via E-mail: john.lund@usda.gov or on the Internet at: http://www.ams.usda.gov/fv/fvqual.htm.

Military activities should submit requests for copies of this CID to: Standardization Documents Order Desk, Defense Automation Printing Service, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.
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<tr>
<th>MILITARY INTERESTS:</th>
<th>CIVIL AGENCY COORDINATING ACTIVITIES:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Military Coordinating Activity:</strong></td>
<td>DOJ - BOP</td>
</tr>
<tr>
<td>Army - GL</td>
<td>HHS - NIH, IHS</td>
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<tr>
<td>Custodians</td>
<td>USDA - FV</td>
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<tr>
<td>Army - GL</td>
<td>VA - OSS</td>
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<tr>
<td>Navy - SA</td>
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<tr>
<td>Air Force - 35</td>
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<tr>
<td>Review Activities</td>
<td>USDA - FV</td>
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<tr>
<td>Army - MD, QM</td>
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<tr>
<td>Navy - MC</td>
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<td>DLA - SS</td>
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<td>Air Force - 35</td>
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