COMMERCIAL ITEM DESCRIPTION

NATURAL BUTTER FLAVOR GRANULES, SPRAY-DRIED

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

1. SCOPE. This CID covers spray-dried natural butter flavor granules (butter flavor granules), packed in commercially acceptable containers, suitable for use by Federal, State, local governments, and other interested parties; and as a component of operational rations.

2. PURCHASER NOTES.

2.1 Purchasers shall specify the following:

- Type(s), style(s), and package(s) of butter flavor granules desired (Sec. 3).
- When analytical requirements are different than specified (Sec. 7.1).
- When analytical requirements need to be verified (Sec. 7.2).
- Manufacturer’s/distributor’s certification (Sec. 10.3) or USDA certification (Sec. 10.4).

2.2 Purchasers may specify the following:

- When the butter flavor granules are to be graded or inspected by the Dairy Grading Branch (DGB), Dairy Programs (DP), Agricultural Marketing Service (AMS), USDA (Sec. 10).
- Food defense section 10.1: Food defense system survey (FDSS) (Sec. 10.1).
- Packaging requirements other than commercial (Sec. 11).

3. CLASSIFICATION. The butter flavor granules shall conform to the following list which shall be specified in the solicitation, contract, or purchase order.
Types, styles, and packages.

Type I - Regular
Type II - Light in sodium (in accordance with 21 Code of Federal Regulations (CFR) § 101.56(c) (2))

Style A - Granules/sprinkles
Style B - Mix (with water and use like melted butter)

Package 1 - 2 g (0.07 oz) packet
Package 2 - 113.4 g (4 oz) packet
Package 3 - 156 g (5.5 oz) container
Package 4 - Other (as specified by the purchaser)

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

- Processing guidelines (Sec. 5).
- Salient characteristics (Sec. 6).
- Analytical requirements: as specified by the purchaser (Sec. 7).
- Manufacturer’s/distributor’s assurance (Sec. 8).
- Regulatory requirements (Sec. 9).
- Quality assurance provisions: as specified by the purchaser (Sec. 10).
- Packaging requirements other than commercial: as specified by the purchaser (Sec. 11).

5. PROCESSING GUIDELINES.

5.1 Processing. The butter flavor granules shall be processed in accordance with Current Good Manufacturing Practices (21 CFR Part 110).

5.2 Food security. The butter flavor granules should be processed and transported in accordance with the Food and Drug Administration’s (FDA’s) Guidance for Industry: Food Producers, Processors, and Transporters: Food Security Preventive Measures Guidance. This guidance identifies the kinds of preventive measures food manufacturers, processors, or handlers may take to minimize the risk that food under their control will be subject to tampering or other malicious, criminal, or terrorist actions. The implementation of enhanced food security preventive measures provides for the security of a plant’s production processes and includes the

1 http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/FoodDefenseandEmergencyResponse/ucm083075.htm
storage and transportation of pre-production raw materials, other ingredients, and postproduction finished product.

5.3 **Age requirement.** Unless otherwise specified in the solicitation, contract, or purchase order, the butter flavor granules shall be processed and packaged not more than 90 days prior to delivery to the purchaser. Age requirements for Department of Defense (DoD) procurements shall be specified in the solicitation, contract, or purchase order.

6. **SALIENT CHARACTERISTICS.**

6.1 **Ingredients.** The butter flavor granules shall contain dried butter, natural butter flavoring, maltodextrin (natural carbohydrate derived from corn), and salt. The butter flavor granules may contain buttermilk solids, whey, other natural flavorings, cornstarch, partially hydrogenated soybean oil, shortening, paprika, annatto, turmeric, sugar, guar gum, and sodium bicarbonate. All ingredients, including food grade bulking and anticaking agents, used in the preparation of the butter flavor granules shall be of Food Chemicals Codex purity or U.S. Pharmacopeia-National Formulary quality, and meet the related FDA regulations on food additives or generally recognized as safe (GRAS) requirements.

6.1.1 **Dairy ingredients.** Dairy ingredients used in the manufacture of butter flavor granules shall originate from a plant that has been approved by the DGB, DP, AMS, USDA.

6.1.2 **Manufacturing plants.** The manufacturing plants shall be eligible for Section I listing in the most recent version of the publication *Dairy Plants Surveyed and Approved for USDA Grading Service*.

6.2 **Finished product.**

6.2.1 **Appearance.** The butter flavor granules shall be a free flowing, uniform, granular powder, and shall be free from lumps.

6.2.2 **Color.** The butter flavor granules shall have an off white/light yellow to medium yellow color.

6.2.3 **Odor and flavor.** The butter flavor granules shall have a mild butter odor and flavor. The butter flavor granules shall be free from foreign odors or objectionable flavors, such as, but not limited to, rancid, sour, stale, malty, soapy, tallowy, bitter, or scorched.

6.2.4 **Texture.** The butter flavor granules shall have a fine granule shape that readily dissolves in the mouth or on hot, moist food.
6.3 **Reconstituted product.** After reconstitution in accordance with the manufacturer’s directions; the product shall meet the following.

6.3.1 **Dispersability.** The reconstituted butter flavor granules shall readily dissolve and show no evidence of curdling, feathering, or undissolved floating particles.

6.3.2 **Odor.** The reconstituted butter flavor granules shall have an odor of melted butter.

6.3.3 **Flavor.** The reconstituted butter flavor granules shall have the flavor of melted butter.

6.3.4 **Color.** The reconstituted butter flavor granules shall have a translucent light to pale yellow color.

6.4 **Foreign material.** The butter flavor granules shall be clean, sound, wholesome, and free from evidence of rodent or insect infestation. The product shall be free from foreign material such as, but not limited to dirt, insect parts, hair, wood, glass, or metal.

7. **ANALYTICAL REQUIREMENTS.**

7.1 **Analytical and microbiological requirements.** Unless otherwise specified in the solicitation, contract, or purchase order, the analytical and microbiological requirements for the butter flavor granules shall be as follows.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Requirement Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moisture</td>
<td>Not more than 6.0 percent</td>
</tr>
<tr>
<td>Water activity (a_w)</td>
<td>Shall not exceed 0.62</td>
</tr>
<tr>
<td>Sodium, Type I</td>
<td>Not more than 180 mg²</td>
</tr>
<tr>
<td>Sodium, Type II</td>
<td>Not more than 45 mg²</td>
</tr>
<tr>
<td>Aerobic plate count (APC)</td>
<td>Not more than 50,000 Colony Forming Unit (CFU) per gram</td>
</tr>
<tr>
<td>Yeast and mold</td>
<td>Not more than 100 CFU per gram</td>
</tr>
<tr>
<td>Coliform</td>
<td>Less than 10 CFU per gram or less than 3 Most Probable Number (MPN) per gram using the CFU/MPN technique³</td>
</tr>
<tr>
<td>Salmonella</td>
<td>Negative</td>
</tr>
<tr>
<td>Listeria monocytogenes</td>
<td>Negative</td>
</tr>
<tr>
<td>Enterobactericeae</td>
<td>Negative</td>
</tr>
<tr>
<td>Staphylococcus aureus (coagulase positive)</td>
<td>Not more than 10 CFU per gram³</td>
</tr>
</tbody>
</table>

² Sodium is per a 2 g serving of butter flavored product.

³ Finding indicates zero colonies (CFU) per plate or zero tubes producing gas for MPN.
7.2 **Product verification.** When USDA verification of analytical requirements is specified in the solicitation, contract, or purchase order, the following procedures shall be followed.

7.2.1 **Sampling procedures.** For analytical testing, USDA inspection service will select the number of product containers based on USDA inspection service sampling procedures and plans. For microbiological testing, except *Salmonella* collect ten 227 g (8 oz) subsamples (or packages) at random. Do not break or cut larger packages to obtain a 227 g (8 oz) sample. Collect the intact retail unit as the subsample even if it is larger than 227 g (8 oz). For *Salmonella*, collect 60 packages at random.

7.2.2 **Composite sample.** Analytical testing shall be performed on a composite sample. The composite sample shall be 600 g (21.2 oz) prepared from subsamples drawn from randomly selected containers. The number of subsamples used to create the composite sample shall be based on USDA procedures. For microbiological testing, except *Salmonella*, each sample should be tested as required, For *Salmonella* testing, six composite samples each consisting of 10 packages should be prepared and tested.

7.3 **Analytical testing.** When specified in the solicitation, contract, or purchase order, the analyses shall be in accordance with the following methods from the AOAC International Official Methods of Analysis (OMA) or FDA Bacteriological Analytical Manual (BAM) methods:

<table>
<thead>
<tr>
<th>Test</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moisture</td>
<td>927.05 or 985.14</td>
</tr>
<tr>
<td>a_w</td>
<td>978.18</td>
</tr>
<tr>
<td>Sodium</td>
<td>969.23, 984.27, 985.35, or 2011.14</td>
</tr>
<tr>
<td>APC</td>
<td>966.24, 990.12, or 2008.10</td>
</tr>
<tr>
<td>Yeast and mold</td>
<td>995.21, 997.02, or 2002.11</td>
</tr>
<tr>
<td>Coliform</td>
<td>989.10, 991.14, 996.02, 2000.15, 2005.03, or 2008.10</td>
</tr>
<tr>
<td><em>Salmonella</em></td>
<td>986.35, 996.08, 994.04, 967.26, 2003.09, or 2011.03</td>
</tr>
<tr>
<td><em>Listeria monocytogenes</em></td>
<td>2003.12, 2004.02, or 2010.02</td>
</tr>
<tr>
<td><em>Enterobactericeae</em></td>
<td>991.13, 2003.01, or 2011.17</td>
</tr>
<tr>
<td><em>Staphylococcus aureus</em> (coagulase positive)</td>
<td>975.55, 987.09, 2001.05, or 2003.08</td>
</tr>
</tbody>
</table>
7.4 **Test results.** The test results for moisture shall be reported to the nearest 0.1 percent. The test result for $a_w$ shall be reported to the nearest 0.01. The test results for sodium shall be reported to the nearest 1.0 mg. The test results for APC shall be reported to the nearest 1,000 CFU per g. The test results for yeast and mold shall be reported to the nearest 10 CFU per g. The test results for *Coliform* count and *Staphylococcus aureus* (coagulase positive) shall be reported to the nearest CFU per g. The test results for *Salmonella*, *Listeria monocytogenes*, *Enterobacteriaceae*, and *E. coli* shall be reported according to the test method. Any result not conforming to the analytical and microbiological requirements shall be cause for rejection of the lot.

8. **MANUFACTURER'S/DISTRIBUTOR'S PRODUCT ASSURANCE.** The manufacturer/distributor shall certify that the butter flavor granules provided shall meet the salient characteristics of this CID, conform to their own specifications, standards, and quality assurance practices, and be the same butter flavor granules offered for sale in the commercial market. The purchaser reserves the right to require proof of conformance.

9. **REGULATORY REQUIREMENTS.** The delivered butter flavor granules shall comply with all applicable Federal and State mandatory requirements and regulations relating to the preparation, packaging, labeling, storage, distribution, and sale of the butter flavor granules in the commercial marketplace. Delivered butter flavor granules shall comply with all applicable provisions of the Federal Food, Drug, and Cosmetic Act, the Fair Packaging and Labeling Act, and regulations promulgated thereunder. The delivered butter flavor granules shall comply with the allergen labeling requirements of the Federal Food, Drug and Cosmetic Act.

10. **QUALITY ASSURANCE PROVISIONS.** *Purchaser shall specify 10.2, 10.3 or 10.4; purchaser may specify 10.1.*

10.1 **Food defense.** When required in the solicitation, contract, or purchase order, a FDSS shall be conducted by USDA, AMS, Fruit and Vegetable Program (FV), Specialty Crops Inspection Division (SCI). Food defense requirements include a documented and operational food defense plan that provides for the security of a plant’s production processes and includes the storage and transportation of pre-production raw materials and other ingredients and postproduction finished product. The plan shall address the following areas: (1) food security plan management; (2) outside and inside security of the production and storage facilities; (3) slaughter, when applicable, and processing, including all raw material sources; (4) shipping and receiving; (5) storage; (6) water and ice supply; (7) mail handling; (8) personnel security; and (9) transportation, shipping, and receiving. *(An AMS, FDSS verifies the participating company’s*
adherence to the FDA’s “Guidance for Industry - Food Producers, Processors, and Transporters: Food Security Preventive Measures Guidance.” For further information, see section 13.2 and 13.4.2.

10.2 Manufacturer’s quality assurance and plant survey. When required in the solicitation, contract, or purchaser order, the product manufacturer shall be required to have their facilities inspected by USDA, AMS, DP, DGB, and be eligible for listing in Section I of the AMS publication Dairy Plants Surveyed and Approved for USDA Grading Service. (An AMS plant survey verifies that, at the time of the survey, the manufacturer produces products in a clean, sanitary environment in accordance with 21 CFR Part 110 - Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Human Food and the requirements contained in 7 CFR Part 58 General Specification for Dairy Plants Approved for USDA Inspection and Grading Service.)

10.3 Manufacturer’s/distributor’s certification. When required in the solicitation, contract, or purchase order, the manufacturer/distributor will certify that the butter flavor granules distributed meets or exceeds the requirements of this CID.

10.4 USDA certification. When required in the solicitation, contract, or purchase order that product quality and acceptability or both be determined, the USDA, AMS, DP, DGB, shall be the certifying program. DGB inspectors shall certify the quality and acceptability of the butter flavor granules in accordance with DGB procedures which include selecting random samples of the butter flavor granules, evaluating the samples for conformance with the salient characteristics of this CID and other contractual requirements, and documenting the findings on official DGB certificates. In addition, when required in the solicitation, contract, or purchase order, DGB inspectors will examine the butter flavor granules for conformance to the U.S. Standards for Condition for Food Containers (7 CFR Part 42) in effect on the date of the solicitation. To qualify for this option the plant must be listed in Dairy Plants Surveyed and Approved for USDA Grading Service (see Sec. 10.2).

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

12. USDA INSPECTION NOTES. When Section 10.4 is specified in the solicitation, contract, or purchase order, USDA certification shall include evaluation of the quality and condition of samples of butter flavor granules, and compliance with requirements in the following areas:

- Processing guidelines (Sec. 5).
- Salient characteristics (Sec. 6).
- Analytical requirements when specified in the solicitation, contract, or purchase order (Sec. 7.1). When USDA analytical testing is specified, DGB inspection personnel shall
select samples and submit them to the USDA, Science and Technology Programs (S&TP) laboratory for analysis.
- Packaging requirements (Sec. 11 or as specified in the solicitation, contract, or purchase order).

13. REFERENCE NOTES.


13.2 FDSS contact. For a FDSS survey, contact the Chief, Inspection Branch, SCI, FV, AMS, USDA, STOP 0240, 1400 Independence Avenue, SW, Washington, DC 20250-0240 telephone (202) 720-2482, Fax (202) 720-0393, or via E-mail: Nathaniel.Taylor@ams.usda.gov.

13.3 Analytical testing and technical information. For USDA technical information on analytical testing, contact the Director, USDA, AMS, S&T, Laboratory Division, 801 Summit Crossing Place, Suite B, Gastonia, NC 28054, telephone (704) 867-3873, Fax (704) 853-2800, or via E-mail: AMSLaboratoryDivision@ams.usda.gov.

13.4 Sources of documents.

13.4.1 Sources of information for nongovernmental documents are as follows:

Copies of the AOAC International OMA may be obtained from: AOAC International, 481 North Frederick Avenue, Suite 500, Gaithersburg, MD 20877-2471, telephone (301) 924-7077. Internet address: http://www.aoac.org for non-members and http://www.eoma.aoac.org for members and AOAC OMA subscribers.

Copies of the Food Chemicals Codex and U.S. Pharmacopeia may be purchased from: United States Pharmacopeial Convention, 12601 Twinbrook Parkway, Rockville, MD 20877-1790, telephone (800) 227-8772 or (301) 881-0666, Fax (301) 816-8148. Internet address: www.usp.org.

13.4.2 Sources of information for governmental documents are as follows:

Applicable provisions of the U.S. Standards for Condition of Food Containers are contained in 7 CFR Part 42, the Fair Packaging and Labeling Act are contained in 16 CFR Parts 500 to 503, and the Federal Food, Drug, and Cosmetic Act are contained in 21 CFR Parts 1 to 199. These documents may be purchased from: Superintendent of Documents, New Orders, P.O. Box 979050 St. Louis, MO, 63197-9000. Credit card (Visa, MasterCard, Discover/NOVUS, and
American Express) purchases may be made by calling the Superintendent of Documents on (866) 512-1800, (202) 512-1800. These documents may also be obtained free of charge on the Internet at:


Copies of the Bacteriological Analytical Manual (BAM) are available from: FDA, Center of Food Safety and Applied Nutrition (CFSAN) on the Internet at:

Copies of Guidance for Industry - Food Producers, Processors, and Transporters: Food Security Preventive Measures Guidance is available online from: FDA, CFSAN on the Internet at:

Copies of this CID and the U.S. Standards for Condition of Food Containers (7 CFR Part 42), and beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data which may improve this CID are available from and/or provided to: Chief, Standardization Branch, SCI, FV, AMS, USDA, STOP 0240, 1400 Independence Avenue, SW, Washington, DC 20250-0240, telephone (202) 720-5021, Fax (202) 690-1527, via E-mail: Robin.Chilton@ams.usda.gov or on the Internet at:

Copies of this CID are also available online at: ASSIST Online (https://assist.dla.mil) or ASSIST Quick Search (https://assist.dla.mil/quicksearch) or from the Standardization Documents Order Desk, Document Automation and Production Service, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.
MILITARY INTERESTS: CIVIL AGENCY COORDINATING ACTIVITIES:

Military Coordinating Activity

- Army - GL

Custodians

- Army - GL
- Navy - SA
- Air Force - 35

Preparing Activity:

- USDA - FV

Review Activities

- Army - MD, QM
- Navy - MC
- DLA - SS

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at https://assist.dla.mil.

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