COMMERCIAL ITEM DESCRIPTION

SOUP MIXES, DEHYDRATED

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

1. SCOPE. This Commercial Item Description (CID) covers quick-cooking, instant, and slow-cooking dehydrated soup mixes, 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. PROCUREMENT NOTES.

2.1 Purchasers shall specify the following:

- Type(s), style(s), flavor(s), flavor profile(s), fortification and option(s) of dehydrated soup mixes desired (Sec. 3).
- When analytical requirements are different than specified (Sec. 6.1).
- When analytical requirements need to be verified (Sec. 6.3).
- 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. The dehydrated soup mixes shall conform to the types, styles, flavors, flavor profiles, fortification, and options in the following list that shall be specified in the solicitation, contract, or purchase order.

AMSC N/A

FSC 8935
Types, styles, flavors, flavor profiles, fortification, and options.

Type I - Quick-cooking
Type II - Instant
Type III - Slow-cooking

Style A - With added monosodium glutamate (MSG)
Style B - No added MSG
Style C - Reduced sodium (21 CFR Part 101.61)
Style D - Reduced sodium (21 CFR Part 101.61) with no added MSG

Flavor 1 - Vegetarian Vegetable
Flavor Profile a - Plain (No flavoring) 1/
Flavor Profile b - Chicken Flavored Vegetable 1/
Flavor Profile c - Beef Flavored Vegetable 1/
Flavor Profile d - Pork Flavored Vegetable 1/
Flavor Profile e - Spicy Vegetable Blend 1/
Flavor Profile f - Fish Flavored Vegetable 1/

1/ Type III, slow cooking only

Flavor 2 - Chicken Vegetable
Flavor 3 - Cream of Vegetable
Flavor 4 - Lentil
Flavor 5 - Black Bean
Flavor 6 - Potato Leek
Flavor 7 - Navy Bean
Flavor 8 - Chicken Noodle
Flavor 9 - Green Pea
Flavor 10 - Corn Chowder
Flavor 11 - Cream of Broccoli
Flavor 12 - Cream of Spinach
Flavor 13 - Tomato
Flavor 14 - Onion
Flavor 15 - Minestrone
Flavor 16 - Other

Fortification a - Nutritionally fortified
Fortification b - Not nutritionally fortified
Option i - With additional ingredients, such as, but not limited to: starches, food colorings, wheat gluten, soy products, acidulent sweeteners, barley/grains, or vegetable oil.
Option ii - No additional ingredients other than those listed in Sec. 5.5.1.

4. MANUFACTURER’S/DISTRIBUTOR’S NOTES. Manufacturer’s/distributor’s 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 Definitions.

5.1.1 Type I quick cooking. Type I dehydrated soup mixes are considered quick cooking when they can be prepared by cooking in boiling water for 5 minutes.

5.1.2 Type II instant. Type II dehydrated soup mixes are considered instant when they can be reconstituted in boiling water in approximately one minute.

5.1.3 Type III slow cooking. Type III dehydrated soup mixes are considered slow cooking when they can be fully reconstituted in boiling water for not more than 40 minutes.

5.2 Processing. The dehydrated soup mixes shall be prepared in accordance with good manufacturing practices (21 CFR Part 110).

5.3 Vegetables. The vegetables used in the preparation of the dehydrated soup mix products shall be prepared from the latest season's crop. The dehydrated vegetables used in the soup mixes shall be prepared from properly matured, wholesome, clean vegetables.

5.4 Date of pack requirement. The dehydrated soup mixes shall be processed and packaged less than one year prior to delivery.
5.5 **DEHYDRATED PRODUCT.**

5.5.1 **Ingredients.** The dehydrated soup mixes shall contain soup base and ingredients, such as, but not limited to; meat or poultry, noodles, macaroni, rice, lentils, beans, carrots, onions, celery, green beans, potatoes, corn, parsley, red and/or green bell peppers, cabbage, salt, seasonings, in addition to other ingredients that are specific to the flavor.

5.5.1.1 **Animal-based products.** The dehydrated soup mixes may contain, but not limited to, dehydrated beef, pork, poultry, or fish appropriate for the specific flavor. The dehydrated soup mixes containing poultry shall meet the requirements of 9 CFR 381.167. Flavor 1, Vegetarian Vegetable, shall not contain animal-based products.

5.5.1.2 **Noodles.** When present in the dehydrated soup mixes the noodles shall contain eggs or egg yolks, enriched wheat flour, durum semolina flour and/or whole wheat flour.

5.5.1.3 **Macaroni.** When present in the dehydrated soup mixes the macaroni shall contain enriched wheat flour, durum semolina flour and/or whole wheat flour, and may be formed into various shapes such as but not limited to: elbow, shell, twists, or ribbons.

5.5.1.4 **Soup base.** The soup base may be derived from vegetable and/or meat/poultry stock, natural and/or artificial, as appropriate for the specific flavor of dehydrated soup mix with the exception of Flavor 1, Vegetarian Vegetable.

5.5.2 **Flavor and odor.** The dehydrated soup mixes shall have appropriate characteristic flavors and odors. There shall be no foreign flavors and odors such as, but not limited to; burnt, scorched, stale, rancid, musty, or moldy.

5.5.3 **Color.** The dehydrated soup mixes shall possess a color representative of the specific flavor.

5.5.4 **Flavoring ingredients.** The flavoring ingredients for Flavor 1, Vegetarian Vegetable dehydrated soup mix shall contain only natural vegetable flavorings and spices. Beef, pork, poultry, fish, or other animal-based broth products are not allowed.

5.5.5 **Monosodium Glutamate (MSG) content.** When Styles B and D dehydrated soup starters are specified in the solicitation, contract, or purchase order, there shall be no added MSG. **Note:** Naturally occurring MSG in soup mixes is generally insignificant at 0.1 - 0.8 percent.

5.5.6 **Defects.** The dehydrated vegetables used in the dehydrated soup mixes shall be reasonably free from defects which detract from the appearance of the product, such as, but not limited to; blemished
units, discoloration, and extraneous vegetable material. Defective units shall not exceed 16 percent by weight of all vegetable material based on the average of samples inspected. No sample shall contain more than 5 pieces of peel greater than 6.3 mm (1/4-inch) in any dimension.

5.6 **REHYDRATED PRODUCT.**

5.6.1 **Flavor and odor.** The rehydrated soup mixes shall have appropriate characteristic flavors and odors. There shall be no foreign flavors and odors such as, but not limited to: burnt, scorched, stale, or rancid.

5.6.2 **Color.** The rehydrated soup mixes shall have a color characteristic for the flavor.

5.6.3 **Consistency.** The soup mixes shall fully and completely rehydrate when prepared according to package directions.

5.6.4 **Texture.** All ingredients shall adequately rehydrate. The rehydrated noodles, macaroni, or rice shall be soft but not mushy. The rehydrated meat or poultry, vegetables, lentils, and beans shall be slightly soft and tender. The rehydrated soup shall not contain excessively chewy or hard pieces.

5.6.5 **Defects.** The rehydrated soup mixes shall be practically free from any defects that materially affect the edibility of the product.

5.7 **Foreign material.** All ingredients and finished product shall be clean, sound, wholesome, and free from evidence of rodent or insect infestation.

6. **ANALYTICAL REQUIREMENTS.**

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

<table>
<thead>
<tr>
<th>Analytical Requirement</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerobic (Standard) Plate Count</td>
<td>Less than 50,000 per gram in any sample</td>
</tr>
<tr>
<td>Reduced sulfite <em>Anaerobic</em></td>
<td>Less than 10 CFU (Colony Forming Units) per gram</td>
</tr>
<tr>
<td><em>Clostridium</em></td>
<td></td>
</tr>
<tr>
<td>Yeast</td>
<td>Less than 10 CFU per gram</td>
</tr>
<tr>
<td>Mold</td>
<td>Less than 10 CFU per gram</td>
</tr>
<tr>
<td><em>Coliform</em></td>
<td>Less than 3 per gram using the MPN (Most Probable Number) technique</td>
</tr>
<tr>
<td><em>E. coli</em></td>
<td>Less than 3 per gram using the MPN technique</td>
</tr>
</tbody>
</table>
Salmonella Shall be negative
Monosodium Glutamate Shall be 0.1 - 0.8 percent for Style B and D

**TABLE I. Moisture and sodium requirements**

<table>
<thead>
<tr>
<th>Flavor</th>
<th>Moisture (max percent by weight)</th>
<th>Sodium (max mg per 100 gm [3.5 oz])</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flavor 1 - Vegetarian Vegetable</td>
<td>5.1</td>
<td>1830</td>
</tr>
<tr>
<td>Flavor Profile a - Plain (No flavor)</td>
<td>9.0</td>
<td>150</td>
</tr>
<tr>
<td>Flavor Profile b - Chicken Flavored Vegetable</td>
<td>9.0</td>
<td>800</td>
</tr>
<tr>
<td>Flavor Profile c - Beef Flavored Vegetable</td>
<td>9.0</td>
<td>800</td>
</tr>
<tr>
<td>Flavor Profile d - Pork Flavored Vegetable</td>
<td>9.0</td>
<td>800</td>
</tr>
<tr>
<td>Flavor Profile e - Spicy Vegetable Blend</td>
<td>9.0</td>
<td>200</td>
</tr>
<tr>
<td>Flavor Profile f - Fish Flavored Vegetable</td>
<td>9.0</td>
<td>1000</td>
</tr>
<tr>
<td>Flavor 2 - Chicken Vegetable</td>
<td>6.3</td>
<td>2870</td>
</tr>
<tr>
<td>Flavor 3 - Cream of Vegetable</td>
<td>4.4</td>
<td>3785</td>
</tr>
<tr>
<td>Flavor 4 - Lentil</td>
<td>7.5</td>
<td>1430</td>
</tr>
<tr>
<td>Flavor 5 - Black Bean</td>
<td>5.4</td>
<td>1250</td>
</tr>
<tr>
<td>Flavor 6 - Potato Leek</td>
<td>6.4</td>
<td>2705</td>
</tr>
<tr>
<td>Flavor 7 - Navy Bean</td>
<td>5.9</td>
<td>2157</td>
</tr>
<tr>
<td>Flavor 8 - Chicken Noodle</td>
<td>4.7</td>
<td>3030</td>
</tr>
<tr>
<td>Flavor 9 - Green Pea</td>
<td>6.4</td>
<td>1700</td>
</tr>
<tr>
<td>Flavor 10 - Corn Chowder</td>
<td>5.0</td>
<td>1940</td>
</tr>
<tr>
<td>Flavor 11 - Cream of Broccoli</td>
<td>3.8</td>
<td>4300</td>
</tr>
<tr>
<td>Flavor 12 - Cream of Spinach</td>
<td>3.9</td>
<td>4345</td>
</tr>
<tr>
<td>Flavor 13 - Tomato</td>
<td>3.0</td>
<td>4180</td>
</tr>
<tr>
<td>Flavor 14 - Onion</td>
<td>5.5</td>
<td>6080</td>
</tr>
<tr>
<td>Flavor 15 - Minestrone</td>
<td>6.0</td>
<td>2875</td>
</tr>
</tbody>
</table>

1/ Type III, slow cooking only

6.2 **Product verification.** When USDA verification of analytical requirements is specified in the solicitation, contract, or purchase order, the following procedures will be 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.** Analytical and microbiological testing shall be performed on a composite sample. The composite sample shall be 454 grams (1 pound) and prepared from subsamples drawn from randomly selected containers. The number of subsamples used to create the composite sample shall be based on USDA procedures.

6.3 **Preparation of sample.** Product shall be prepared according to the following method: In an appropriately sized blender container, blend the sample to uniformity in a minimum of time.

6.4 **Analytical testing.** When specified in the solicitation, contract, or purchase order, analyses shall be 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>Moisture</td>
<td>934.06 (at 70°C for 6 hours)</td>
</tr>
<tr>
<td>Sodium</td>
<td>969.23, 985.35, 984.27</td>
</tr>
<tr>
<td>Aerobic (Standard) Plate Count</td>
<td>966.23 or 990.12</td>
</tr>
<tr>
<td>Yeast and Mold</td>
<td>Section 16.51 2/, 997.02</td>
</tr>
<tr>
<td><em>Coliform</em></td>
<td>966.24</td>
</tr>
<tr>
<td><em>E. coli</em></td>
<td>966.24</td>
</tr>
<tr>
<td><em>Salmonella</em></td>
<td>967.28, 986.35, 994.04, 996.08</td>
</tr>
<tr>
<td>Reduced Sulfite <em>Anaerobic Clostridium</em></td>
<td>976.30, 37.71 - 37.73 2/</td>
</tr>
<tr>
<td>Monosodium Glutamate 3/</td>
<td>970.37</td>
</tr>
</tbody>
</table>

3/ For Styles B and D (without added monosodium glutamate) dehydrated soup mixes.

6.5 **Test results.** The test results for moisture and monosodium glutamate shall be reported to the nearest 0.1 percent. The test results for sodium shall be reported to the nearest milligram per gram. The test results for the Aerobic (Standard) Plate Count shall be reported to the nearest 2,500 CFU per gram. Each test result for both yeast and mold shall be reported to the nearest 10 CFU per gram. The test results for *coliform* and *E. coli* shall be reported to the nearest MPN. The test results for *salmonella* shall be reported as negative or positive. The test results for reduced sulfite *anaerobic clostridium* shall be reported to the nearest CFU per gram. 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 dehydrated soup mixes provided shall meet the salient characteristics of this CID, conform to their own specifications, standards, and quality assurance practices, and be the same prepared dehydrated
soup mixes offered for sale in the commercial market. The purchaser reserves the right to require proof of conformance.

8. REGULATORY REQUIREMENTS. The delivered dehydrated soup mixes shall comply with all applicable Federal, State, and local mandatory requirements and regulations relating to the preparation, packaging, labeling, storage, distribution, and sale of dehydrated soup mixes within the commercial marketplace. Delivered dehydrated soup mixes 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 may result in the contract being terminated for cause.

9.1.1 Plant systems audit. A plant systems audit (PSA) conducted by USDA, Agricultural Marketing Service (AMS), or another audit performed by a third party auditing service is required 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 in accordance with Title 21 Code of Federal Regulations Part 110 - Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Human Food, 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 another survey performed by a third party auditing service is required 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 Title 21 Code of Federal Regulations Part 110 - Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Human Food.)

9.2 Manufacturer’s/distributor’s certification. When required in the solicitation, contract, or purchase order, the manufacturer/distributor will certify that the finished dehydrated soup mixes 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), Fruit and Vegetable Programs (FVP), AMS, USDA, shall be the certifying program. PPB inspectors shall certify the quality and acceptability of the dehydrated soup mixes in accordance with PPB procedures which include selecting random samples of the packaged dehydrated soup mixes, 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 dehydrated soup mixes 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 dehydrated soup mixes, and compliance with requirements in the following areas:

   - Salient characteristics (Sec. 5.3, 5.5, 5.6, and 5.7).
   - Analytical requirements *when specified in the solicitation, contract, or purchase order* (Sec. 6.2). 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, FVP, 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 **Analytical testing and 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 Source of information for nongovernmental documents are as follows:

Copies of the BAM and Official Methods of Analysis of the AOAC International may be requested from: AOAC International, 481 North Frederick Avenue, Suite 500, Gaithersburg, MD 20877, telephone (202) 924-7077. Internet address: 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, telephone (202) 720-9939, Fax (202) 690-0102, via E-mail: FQAStaff@usda.gov or on the Internet at: http://www.ams.usda.gov/fv/fvqual.htm.

Requests for copies of this CID should be sent to: Head, Food Quality Assurance Staff, FVP, AMS, USDA, STOP 0243, 1400 Independence Avenue, SW, Washington, DC 20250-0243, telephone (202) 720-9939, Fax (202) 690-0102, via E-mail: FQAStaff@usda.gov or on the Internet at: http://www.ams.usda.gov/fv/fvqual.htm.

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any data which may improve this document should be sent to: Commander, Defense Supply Center Philadelphia, ATTN: DSCP-HSL, 700 Robbins Avenue, Philadelphia, PA 19111-5092 or FAX (215) 737-2963, or via E-mail: sagallagher@dscp.dla.mil.

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.
MILITARY INTERESTS:  

**Custodians**

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

**Review Activities**

- Army - MD, QM
- Navy - MC

CIVIL AGENCY COORDINATING ACTIVITIES:

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

PREPARING ACTIVITY:

- DLA - SS
  (Project No. 8935-P070)

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